OLD!

THE ESSENTIAL GUIDE TO CLASSIC GAMES

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WE INVESTIGATE NINTENDO'S BIZARRE SNES PERIPHERAL

DIZZY 30TH ANNIVERSARY

The Oliver twins celebrate their most famous creation

All-Star Access!

Virtua Fighter

YU SUZUKI ON PUNCHING OUT THE COMPETITION AND DELIVERING THE KILLER BLOW TO THE 2D FIGHTING GENRE

THE IMPACT OF SCRAMBLE

HOW KONAMI'S SCROLLING BLASTER HELPED DEFINE THE SHOOT-'EM-UP

IN THE CHAIR: NOBUO UEMATSU

THE LEGENDARY COMPOSER DISCUSSES HIS FAVOURITE WORKS

PERFECTING PUYO PUYO

YOUR ULTIMATE GUIDE TO COMPILE'S INCREDIBLE ARCADE PUZZLER

Future
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Plus **KORONIS RIFT** | KIRBY'S FUN PAK | **DOUBLE DRAGON** | BALLY SENTE | **CHIMERA**

THE RETROBATES

WHAT'S YOUR FAVOURITE DIZZY GAME?



DARRAN JONES

The original. I can still remember pestering my Nan to buy it for me and being delighted to find it was as good as *Amstrad Action* had promised.
Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine
Currently playing:
Advance Wars: Dual Strike
Favourite game of all time:
Strider



NICK THORPE

As a Sega kid growing up, I didn't have many choices. *Fantastic Dizzy* for the Master System it is, then.
Expertise:
Owning five Master Systems (I sold two)
Currently playing:
Puyo Puyo Tetris
Favourite game of all time:
Sonic The Hedgehog



DREW SLEEP

There's a nice cafe I go to which do scrambled eggs on sourdough toast.
Expertise:
Pun police
Currently playing:
Fire Emblem Echoes: Shadows Of Valentia
Favourite game of all time:
Final Fantasy VIII



SAM RIBBITS

I've only played the one so I guess I'll have to go for the original Spectrum game.
Expertise:
Pixels
Currently playing:
Prey
Favourite game of all time:
Croc: Legend Of The Gobbos



DAVID CROOKES

Fantasy World Dizzy will always be special because it was my first taste of the little egg. It also introduced the Yolkfolk, which raised the game.
Expertise:
Amstrad, Lynx, adventures, Dizzy, and PlayStation (but is it retro? Debate!)
Currently playing:
Obsidian
Favourite game of all time:
Broken Sword



GRAEME MASON

The original game. A great little arcade adventure and superb value for money.
Expertise:
Adjusting the tape azimuth with a screwdriver
Currently playing:
Command & Conquer: Red Alert
Favourite game of all time:
Resident Evil 4



PAUL DRURY

I had a soft spot for *Kwik Snax*, a clever little action puzzler with a nod to one of my favourite coin-ops, *Pengo*.
Expertise:
Avoiding radiators
Currently playing:
Prey
Favourite game of all time:
Sheep in Space



MARTYN CARROLL

It's got to be *Fantasy World*. It introduced Dizzy's family, featured neat bits like the upside-down town, and the difficulty level was just right.
Expertise:
Sinclair stuff
Currently playing:
Typoman
Favourite game of all time:
Jet Set Willy



JASON KELK

I played the original *Dizzy* on the C64 most, but have a soft spot for *Fast Food* on the Fun Play cartridge, too.
Expertise:
Being a homebrew hero
Currently playing:
Sagaia
Favourite game of all time:
Io

LOADING...



Sega recently announced that it would be looking to its past IPs in order to shape its future. We hope that *Virtua Fighter* is going to be one of the franchises that it resurrects for a new generation of gamers, as it's been way too long since the release of the last game.

It was hard not to be impressed by Yu Suzuki's game when you first saw it in arcades. While it wasn't the prettiest of games, it looked sensational in motion, particularly when you were pulling off its elaborate throws or witnessing the celebration poses of the eight available characters.

I never really had the patience to master *Virtua Fighter* in the arcades and it wasn't until the release of the Sega Saturn port that I truly appreciated just how deep that three-button system was. It might not have had special moves or outlandish-looking characters, but it had an unrivalled depth that meant Suzuki's game was as layered as an onion. So it's with great pleasure then that I can reveal that we've not only spoken to Yu Suzuki this month, but also Tetsuya Kaku, Jeff Buchanan and Michael Latham who all helped turn Sega's game into a critical success.

If you're not a fan of polygons you'll find plenty of great sprite-based articles, including pieces on *Dizzy*, *Chimera*, *Scramble*, *Koronis Rift*, *Kirby's Fun Pack*, *Puyo Puyo* and much more.

Enjoy the magazine!



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> **"When you play a game with the sound turned off, it feels like you can't breathe properly"**





REVIEWS





ESSENTIALS





CODEMASTERS UNBOXES MICRO MACHINES: WORLD SERIES

CONTENTS

The classic multiplayer racing game is back for another lap

Local multiplayer is back in the spotlight lately, thanks to the return of games such as *Bomberman* and *Windjammers*, not to mention the arrival of the Nintendo Switch. However, for many gamers cramming four people onto a sofa is pretty pointless if boisterous toy racing isn't part of the festivities – so it's a good job that Codemasters will be releasing *Micro Machines World Series* for PlayStation 4, Xbox One and PC on 23 June. To find out more about the first *Micro Machines* console game in over a decade, we spoke to Gavin Cooper, chief game designer at Codemasters.



» [PC] Is that a *Micro Machines* cassette for the Spectrum? An artist is clearly having fun here…

Why's the timing right to bring *Micro Machines* back to home consoles?

I think *Micro Machines* has always had a timeless appeal, so it's hard to answer why this *right now* is 'the right time'. If anything, I think some people will complain that it should have happened ages ago! But the truth is that the game exists because of the fans – it's the one game that's been requested over and over; 'When are you guys going to make a new *Micro Machines* game?'

How will this differ to the iOS version that was recently released?

The iOS game was free-to-play, which dictated in large part how that game played, and how it all fitted together. Console gamers want something very different, and *World Series* has been built from the ground up, on entirely new technology, to deliver an all-new experience for the console audience.

There's a big focus on weapons in *World Series*, why is that?

We know from our past experience that nostalgia for *Micro Machines*-style racing gets a lot of people interested, because they have such fond memories of it. But we've also learned that players want *more* than just a retread of the original games.

The battle modes are definitely one area where we're delivering on that – and the power-ups/abilities are a core component of that. Power-ups have been part of the *Micro Machines* experience since *Micro Machines V3* on the PlayStation, but the battle modes really let us explore some fun stuff with those, giving each car its own unique loadout of abilities. In a team-based objective mode, like Capture The Flag, figuring out how to capitalise on the synergies between your team members and counters to the opposing team provides a huge depth of gameplay to keep players interested and engaged well beyond the point at which nostalgia would start to wane!

What can you tell us about the available multiplayer modes?

The game supports online play via Quick Matches and Ranked Matches (which



» [PC] Doggo is at the kitchen table. Get down, Doggo! The little cars must not be eaten!

> **"We've had to pay specific attention to supporting that in terms of how the tracks are built"**
> Gavin Cooper

allow players to progress through the divisions over the course of a season). Both of these support Race, Elimination (the classic 'race your opponents off the edge of the screen' mode), Capture The Flag, King Of The Hill and Bomb Delivery.

In Skirmish (local multiplayer) the game supports one to four players (or AI) in both Elimination and Free-For-All modes. It also allows solo players to play offline races against the AI.

Finally the game also includes Special Events. Each week these offer a new tweak to a game mode, or a twist on the usual experience.

How hard has it been catering to 12-player races?

It can definitely be chaotic at times. And certainly we've had to pay specific attention to supporting that in terms of how the tracks are built and populated with items. But we think we've found the right balance between skill and chaos!

Will there be an option to turn off the weapons so players can enjoy purer racing?

Absolutely! In local multiplayer, players can choose from a number of mutators to tweak how the game plays. And those same mutators are used to author the weekly Special Events for online players, allowing us to come up with interesting gameplay customisation!

***Turbo Tournament '96* is generally considered to be the best game in the series. How will *World Series* improve on it?**

I think the great thing about the *Micro Machines* games is that everyone has their favourite – I know plenty of people who'd argue with you over which one was the best! Luckily there's a good spread of opinions across the dev team, so between us all I think we've got a good handle on the elements that are common to all of the games.

In terms of what we want to add to those, more than anything else, our goal is to retain what's great about *Micro Machines* while also bringing it up to date, and delivering everything a modern game would expect. A persistent player progression system that isn't based on power creep, that doesn't punish new players for being new. Customisation; online play; team-based modes – being able to play with friends without having to compete directly against them; allowing for modes of play that make teamwork as important as individual twitch controller skills; Ongoing content; Hungry Hungry Hippos; ranked seasons; long-term variety and depth of gameplay!

Why do you think the series has remained so popular?

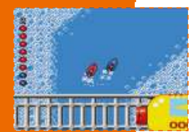
The games have a charm that everybody can relate to. Who hasn't played with toy cars at some point? And the multiplayer has a kind of eternal appeal. Grab a bunch of people together, put them on a sofa and just watch them start to try and push each other off the edge of the table! It's that appeal we want to bring back, and build upon. *



» [PC] Didn't that racer see the warning sign? It reads "Danger: Laser Beams – Pew Pew Pew… arghhh"

MICRO MUSEUM

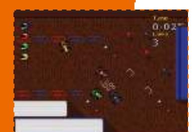
Take a look back at the previous entries in the Micro Machines series…



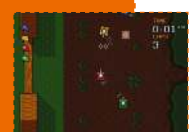
Micro Machines, 1991
The original game started out as *California Buggy Boys* before a licence to use *Micro Machines* was acquired through Game Genie partner Galoob.



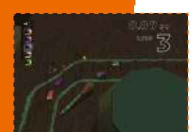
Micro Machines 2: Turbo Tournament, 1994
While many platforms got this excellent racer, the Mega Drive version was most memorable for featuring a cartridge with two extra controller ports.



Micro Machines: Turbo Tournament 96, 1995
This update to *Micro Machines 2* added a track editor, allowing creative players access to thousands of potential racing courses.



Micro Machines: Military, 1996
An oft-forgotten Mega Drive exclusive released only in PAL regions, this game placed you in tanks and gave you some high-explosive shells to play around with.



Micro Machines V3, 1997
The first 3D game in the *Micro Machines* series introduced dynamic camera angles, and also collectable power-ups on the track.



Micro Maniacs, 2000
This spinoff entry featured tiny runners instead of vehicles, and each of them boasted their own unique special abilities. It earned a mixed reception.



Micro Machines V4, 2006
The final console entry in the series launched to a mixed reception, in part due to a high difficulty level.



Micro Machines (Mobile), 2015
The most recent entry in the series shifted the gameplay to a free-to-play racer for the modern mobile market. Its success inspired *World Series*.

IN A SPIN
A NEW DIZZY GAME HEADS TO SPECTRUM NEXT







» The Olivers take time out from working on *SkySaga: Infinite Isles* so they can start designing *Wonderful Dizzy.*

The success of the Spectrum Next on Kickstarter has injected some goodwill back into the Spectrum community and the hype for the exciting new machine continues to grow. The latest news is from the Oliver twins, who have announced that a new *Dizzy* game is on the way, exclusively for the new system.

"We're always asked to create a new *Dizzy* game, but Codemasters blocked it for many years," explains Philip Oliver when we quizzed him about the exciting news. "We have now agreed with them, that provided any money made goes to charity they're okay with us doing it and we're grateful for this." It's an important step for the classic series and just what *Dizzy* needs as he celebrates his 30th anniversary. But how did it all happen?



"On Easter Day this year, completely out of the blue, a group of *Dizzy* fans released a remake of *Crystal Kingdom Dizzy* on the Spectrum," reveals Philip. "It's been completely rewritten from scratch and is incredible quality, technically superior to the original *Dizzy* games and it looks incredible. Then, a week later, Henrique Olifiers, a friend and big *Dizzy* fan, launched a Kickstarter for Spectrum Next. Within 24 hours it hit its target, which really impressed us. Andrew and I were talking saying wouldn't it be cool to produce a new *Dizzy* game for Spectrum Next – Henrique and a lot of the backers would love that. Then we suddenly realised that we could probably ask Dmitri and the CKD team if they'd like to make it if we designed a new game. Of course, this hinged on us designing a new game."

After discussing preliminary plans with Andrew, Philip reached out to the Spectrum next team, including Jarrod Bentley, who worked on the original *Crystal Kingdom Dizzy*, and shared his idea with key members of the *Dizzy* community, including Piotr 'PIT' Gratkiewicz, who has been responsible for a lot of recent *Dizzy* artwork, and Andrew Joseph, who runs yolkfolk.com, *Dizzy*'s biggest fansite. But what was the idea everyone was so excited about? What story did Philip come up with that convinced the rest of the team to steam ahead with a new game? "I was thinking about the classic stories that we'd been inspired by for our previous games like *Alice In Wonderland*, *Jack And The Beanstalk* and was thinking what other classic stories are there when I hit upon *The Wizard Of Oz*," reveals Philip. "I lay there thinking of all the cool ways we could turn this classic story, well out of copyright, into a *Dizzy* adventure."

> **"Dizzy and our heritage in developing many very successful 8-bit games are just a hobby now"**
> Philip Olliver



» [ZX Spectrum] It's not just the Olivers making Next games. Jas Austin and Jim Bagley are also working on it.

It's worth noting that while the Olivers are heavily involved with the design of the new game, they won't be coding it. "We will not be doing any code, design or music," confirms Philip. "People far better than us will take care of this. We'll be responsible for the design and coding will be by Evgeny Barskiy. For us, *Dizzy* and our heritage in developing many very successful 8-bit games are just a hobby now. We are busy at work focusing our attention on *SkySaga: Infinite Isles*."



» [ZX Spectrum] The Oliver twins will be designing the new game, but coding will be by Evgeny Barskiy.

While it's unclear when *Wonderful Dizzy* will be released, we do know that all Spectrum Next backers will receive it for free. If the game end up being sold both Codemasters and the Olivers will donate any royalties to Special Effect and The National Videogame Arcade. What we do know is that the new *Dizzy* game will be reviewed in **Retro Gamer**, providing, of course, that Darran can stop shaking with excitement. *

Nintendo 64 Anthology

Just about every conceivable angle has been covered in Mathieu Manent's comprehensive book on the N64. The book includes the expected sections on the development and history of the console, its commercial life from 1996 to 2002 and its legacy, which focuses on N64 revivals such as *Super Mario 64 DS* and *The Legend Of Zelda: Ocarina Of Time 3D*. Much of the book is devoted to a guide to the console's library of games, with reviews and rarity ratings provided for each. However, there are some very interesting sections featuring developer interviews, a showcase of hardware variants, accounts of the console's life in lesser-documented territories such as Brazil and South Korea, the failed 64DD add-on and even cancelled games. It's also a very attractive book, with design work and production values that help it to stand out from the crowd. If you still long for your trident controller, you'll find plenty to love here.

Price: £39.99 (Collector's Edition £44.99) **From:** funstockretro.co.uk

Contra III: The Alien Wars Soundtrack LP

There's a lot to love about this latest release from Mondo. It features glorious new art by Paul Mann, which captures the exciting over-the-top nature of the game, while the vinyl is equally lavish looking, appearing on Blue and Red 'Camo'. All 13 tracks from the game have been included and they sound absolutely fantastic, easily on par with the impressive efforts that are put out by Data-Discs. The original SNES game has always sounded incredibly meaty when played through a decent hi-fi system and it's no different here, with It's *Time For Revenge* and *Go Forward Under Fire* sounding suitably bombastic. Just be aware that the limited edition 'Spread' vinyl is long out of print.

Price: $25.00 **From:** mondotees.com



SupaBoy S

This bulky handheld allows you to play your original SNES games on the move, with a built-in rechargeable battery and a 4.3 inch widescreen display. It's also possible to hook the SupaBoy S up to your TV with the included composite AV cable, and with two controller ports you'll have the opportunity to issue *Street Fighter II* challenges anywhere you like.

Price: £99.99
From: funstockretro.co.uk

Game Machines 1972 – 2012

This is the second English edition of German writer Winnie Forster's guide to gaming computers and consoles prior to the current generation. The book features attractive photography and brief histories of each machine, as well as information on selected hardware revisions and accessories. Every machine is rated too, which is sure to spark lively debate.

Price: £33.99 **From:** funstockretro.co.uk

PlayStation Mug

Are you concerned that the Society Against PlayStation has gained a foothold in your home or office? If so, there's only one way to show your opposition: drinking from this PlayStation-shaped beverage container on a regular basis. Well, we suppose you could also play a PlayStation, but the actual console is much less tolerant of being filled with hot coffee.

Price: £12.99
From: funstockretro.co.uk


FLATOUT 4
TOTAL INSANITY
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XBOX ONE
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Here's my bio… Paul Rose
Paul Rose is probably better known as Mr Biffo – the creator and chief writer of legendary teletext games magazine *Digitiser*. These days, he mostly writes for kids TV, but can still be found rambling on about games, old and new, for his daily website, Digitiser2000.com.

'In The Zone'

A few years back, I decided that I was going to change careers and become a psychotherapist. Yeah, looking back now that's as surprising to me as it might be to you.

It's something a lot of people my age seemed to be considering, and I managed to stick with the course for a fair few years, getting my Fitness To Practice certificate before having a massive crisis of faith in the way the course was being run – indeed, with the 'talking therapies' industry in general. So, I dropped out.

Furthermore, it was – towards the end of my time on the course – pointed out to us that there was as much chance of us getting paid therapy work as there was of us simultaneously winning the lottery and getting hit by an asteroid. Suffice to say, even if I hadn't already been considering jacking it in, that would've likely shoved me out the door.

I could fill ten columns about why I lost faith, but one of the elements I found controversial was how meditation was sort of seen by some as a magic cure-all. Now, if meditation works for you then that's great. I have got a bunch of mates who swear by it. Unfortunately for me, during our lessons we were expected to sit around in a circle and meditate, and I simply couldn't do it.

The assumption was that silence, and controlling our breathing, would ground us and, you know, allow us to be 'in the moment' and all that guff. The harder I tried not to think of things that would bring me out of the moment, the more I'd think about them – tax bills, the car needing its MOT, whatever drama my kids were going through, and so on.

I brought this up with my tutors one week, who asked me if there's anything else I did which could be seen as meditation. That's when I realised that I've always meditated – and my meditation is games. Not all games, mind. They have to be games which don't need me to be involved intellectually or emotionally. It's all about letting the body, my reflexes, my adrenaline take control.

This was brought home to me recently when I played *Super Mario Kart*. Within ten minutes of playing I realised that I was smiling. My body was flooding with endorphins, and I wasn't thinking about my mountain of work deadlines, or my overdraft, or my parents' health. It was just me and the track. My mind had checked out, and I was 'in the moment'. Nearly three years of therapy training couldn't manage what Nintendo had done in mere minutes.

Part of me does wonder, therefore, whether there's a case to be made for games as therapy. Obviously, I doubt you'd use *Call Of Duty* to treat someone with PTSD – that's asking for trouble – but if it can work for me then I'm sure it could work for others. Too often games are given a bad rap, as causing more problems than they solve, but nobody talks about their potential for good too. Maybe it's time that changed. *



"Part of me does wonder whether there's a case to be made for games as therapy"

What do you think?

Do you agree with Paul's thoughts? Contact us at:

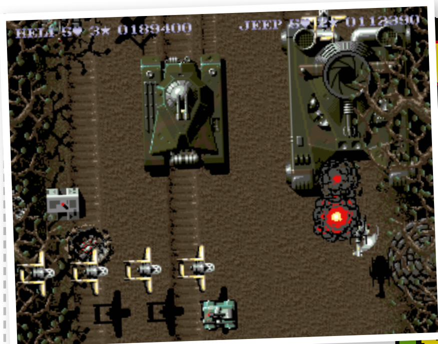
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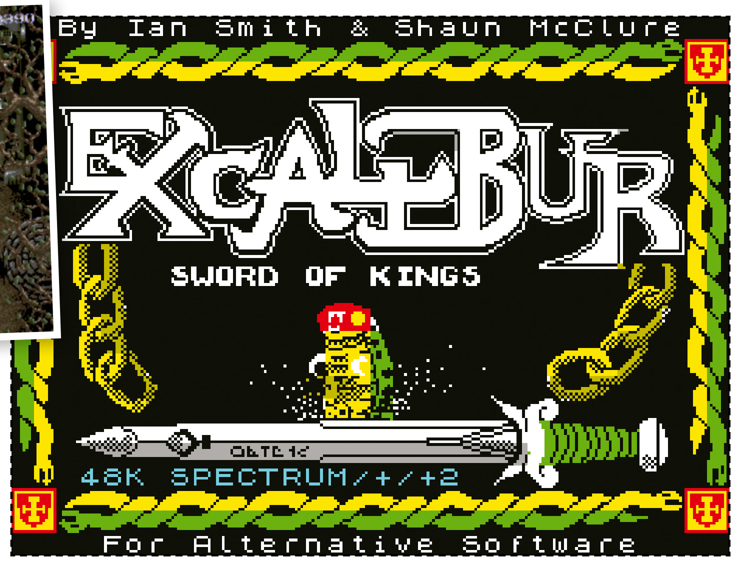
Shaun McClure

We chat to the industry vet about his book, Video Game Development: The Rock And Roll Years

His name might not be one that's immediately familiar to you, but Shaun McClure worked on a number of popular games during his career, including conversions of *Rod-Land*, *NARC* and *Tempest 2000*. Although he left the industry in 2012 he was keen to revisit his past with a new book that gives a very rare insight into what it was like to work in the industry when it was first starting. We caught up with Shaun to find out how the new novel came to be.



» [Amiga] Shaun's Spectrum work enabled him to get a job at Sales Curve, which released hits such as *SWIV*.



» [ZX Spectrum] *Excalibur: Sword Of Kings* was the first game that Shaun worked on.

How did you first get into creating graphics for videogames?
The usual route, I think, which was to pair up with a programmer friend, and work on a game together. I teamed up with a school friend, to write *Excalibur: Sword Of Kings* on the Spectrum. We had high hopes for it, but it was a middling title for Alternative Software – it was a stepping stone into the industry.



AVAILABLE NOW FROM AMAZON, £7.99 ON PAPERBACK, £1.99 ON KINDLE

Why did you decide to write your book about game development?
There seems to be a great deal of interest in the early games industry at the moment, and I've been included in a few books recently, but one thing I have noticed is that everyone seems to want to know how you began in the industry, and about specific games, but there aren't any accounts of day to day working life, with all of the highs and lows, and moving between companies. I wanted to address that by writing the book, specifically as a first-hand account.

How did creating graphics evolve during your time in the industry?
More colours! I originally created graphics by sketching onto graph paper, and then I had to work out the binary values of character squares, which I then had to manually type in, back in the early ZX Spectrum days, before I had access to any art creation tools.

Obviously, there were problems on the ZX Spectrum with colour clash, which took quite a bit of planning to avoid. The jump to 16 colours with the reduced palettes caused me numerous problems to begin with – the jump to 256 colours helped, but then True Colour came around the corner and screwed up years of pixel art technique. Then obviously everything turned 3D, and it all changed again.

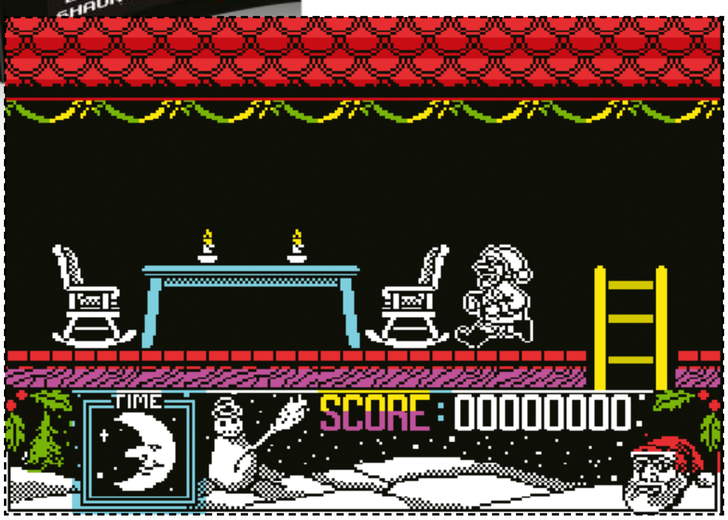
> **"Everything was new, and we were all making it up as we went along"**
> Shaun McClure

What are you hoping gamers can learn from reading your book?
I think it gives a good insight of the games industry and what it was like to be there, working on some brilliant games that were high in the charts, working on some absolute crap, too, but it was probably the best time to be in the industry. Everything was new, and we were all making it up as we went along. Sometimes there wasn't any money and we had to live under our desks in the office. But there was usually a party not far away, and it was a very fun lifestyle.

Which games are you most proud of and why?
Bubsy was a game where I could use my imagination and go a bit wild – I designed and animated many of the boss characters. And *Scrabble* on Game Boy Color was a brilliant technical achievement, mostly for the intricate palette work.

Your book is very personal at times and quite raw. Was this intentional?
Well, I didn't have a specific agenda when I started to write it, but I wanted it to be an honest account of my career, good or bad. One great thing about being older is that you can evaluate yourself in retrospect, often quite critically. There are many things that I have done which I'm not proud of, which I think is true of most people. That's what makes us human.

Do you wish you were still in the games industry?
Naaarrr. *



» [ZX Spectrum] Shaun worked on Christmas caper *The Official Father Christmas Game*.

DISCUSS

What Sega franchise would you like to see resurrected?

Forum
www.retrogamer.net/forum

■ *Out Run*, hands down. Sumo Digital, can you hear me?
Hiro

■ *Alex Kidd*. The blue hedgehog had his chance, it's time to bring back the Kidd.
Gibberish Driftwood

■ Was just thinking about *Ecco The Dolphin*, and what modern consoles can do. Updating this game could produce an undersea world of gorgeous proportions.
kiwimike

■ *Fighters Megamix*. Bringing back the old roster and adding loads more Sega characters from classic franchises, as well as newer ones, would be amazing.
Megamixer

■ *Fantasy Zone*. There's always room for more *Fantasy Zone*.
Mayhem

Twitter
twitter.com/@RetroGamer_mag

■ It goes without saying that *Jet Set Radio* is massively overdue a return. Another visit to the bustling streets of Tokyo-to would be awesome!
@wleigh85

■ *Skies of Arcadia*! One of my favourite RPGs of the generation. Nothing beats flying ships and floating islands!
@Mookmac

■ *Golden Axe*, *Streets Of Rage*, heck any scrolling beat-'em-up!
@LemmingsPorts

■ Has to be *Crazy Taxi*. Such an awesome game, unique as well.
@NiceDiceBaby

■ I would love to see a new *Dynamite Cop*! Such a great arcade game! A remake would be great as well.
@ErikWelleweerd

Facebook
facebook.com/RetroGamerUK

■ *Ristar*. A very underrated platformer that was somewhat a victim of being released too late in the Mega Drive's lifespan.
Keiron Standfield

■ *Hang On*. It'd be great to have that great sense of speed and slick cornering return, also *Metropolis Street Racer*. Surely Sega could do something with *MSR*?
Alan Mealor

■ I'd love to see a remake of *Comix Zone*, preferably with beautifully drawn 2D sprites and a difficulty level below 3am-fever-dream this time.
Dave Ingram

■ *Space Harrier*, *Out Run* and even possibly *Enduro Racer*.
Rich Spowart

■ *Zaxxon* in the style of modern *Star Fox*.
Paul Cyclone



What We Think

Darran
■ After a lot of consideration I really feel that Sega should be embracing VR more. *Rez* proved the format is perfect for on-rail shooters, so how about a new *Panzer Dragoon*?

Nick
■ You know how *Splatoon* is a family-friendly introduction to the squad-based online shooter? *Bonanza Bros* could be an excellent equivalent for the stealth action genre.

Drew
■ If a franchise is dead, it's dead for a reason. I'd prefer Sega makes something new than go spelunking in its vault. If I *had* to pick, though, I'd go for another *House Of The Dead*.

Sam
■ Imagine how beautiful a *Panzer Dragoon* game could look on current (or even next)-gen consoles. Just go nuts on the visuals, Sega. Or, you know, just make *Sonic Battle 2* instead…



WIRELESS MARIO COIN DISPLAY AND 1UP DISPENSER

"One of many crazy ideas. When any button is pressed, a NES controller mounted on the wall sends a signal to the display which goes up by one. When it reaches 99, the next one makes a block full of tiny 1UP plushies open and cover the ground!"

PAID: £0

MEAN MACHINES SEGA MEGA PREVIEW TAPE

"This tape was the most exciting thing that happened to six-year-old me! It features preview footage of many great games."

PAID: £0

JEWEL IN THE CROWN

THE FLINTSTONES: THE SURPRISE AT DINOSAUR PEAK

■ "This rare game was given to me by John Darling, a colleague and brother of David Darling. When developing the Game Genie, Codemasters ordered every game they could to ensure compatibility and this resulted in a great catalogue of games. John very kindly gave me this and a few others for my collection."

PAID: £0

MEGAMAN REPLICA HELMET AND BUSTER GUN

"My wife bought me these for my birthday and they are great additions to my room. They are official replicas."

PAID: £0

CUSTOM LEGEND OF ZELDA N64 CONSOLE

"A project with my daughter, we took an N64 and gave it a *Zelda*-themed makeover. We used an Amiibo cut from its stand to make the console look like a *Wind Waker*-style beach."

PAID: £15 (for materials)



BIO

NAME: Simon Platt

ESTIMATED VALUE: £15,000 (2,000 items)

FAVOURITE SYSTEM: Nintendo 64

FAVOURITE GAME: *Psycho Fox* (Master System)

The Codie Collector

Readers take us through the retro keyhole

Like many of our collectors, Simon has a fantastic room dedicated to his hobby. Unlike most, he has a few unique bespoke items, particularly his Jewel In The Crown and a neat 1UP plushie dispenser that is triggered after 99 button presses. "A friend at work with knowledge of electronics helped me with that," admits Simon, "and while it may be a little overly elaborate and took a lot of effort [to make it], it was totally worth it." Talking of work, from 2011 to 2014 Simon worked within the industry at Codemasters, before moving across to work with David Darling at Kwalee in 2015. "I'm now a producer, managing a team of 20," he says, "and it's incredible to work alongside people who were such an influence on my childhood."

Simon's favourite series growing up was one of Codemasters' most famous titles. "*Dizzy* was the first game I played that delivered a grand adventure. It was full of colourful personas, and dozens of interactive characters. From the slight awkwardness of the rolling jump to the two-frame idle animation, I loved every aspect of it." From there, Simon fell in love with the Sega Master System, and that dominates his collecting at the moment. "I only have 20 games left for a full set," he reveals, "and I have been looking at copies of games such as *The Smurfs Travel The World* for many years. I also have a copy of *Buggy Run* – a pretty rare game – but no box, so am trying to find a box and manual to avoid shelling out for another cart!" Like many of us, as a kid Simon would trade in his games in order to get the cash to buy the latest releases. As a result, this new collection started up again in 2012.

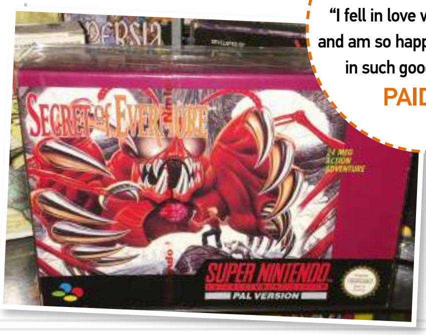
Fortunately Mrs Platt, while not much of a gamer, loves the collection and Simon's magical room of retro. "[My wife] keeps an eye out for bargains for me," he smiles, "and my children spend a lot of time in my games library. I've got over 1,500 games, and all my daughter ever wants to play is *Barbie*!" Spoiler alert: "It's terrible!" Oh dear. Darran will be crushed. ✱

"I'VE GOT OVER 1,500 GAMES, AND ALL MY DAUGHTER EVER WANTS TO PLAY IS BARBIE!"

SECRET OF EVERMORE

"I fell in love with this game and am so happy to own a copy in such good condition."

PAID: £0



BACK TO THE NOUGHTIES

MAY 2000 – A contender enters the console fray as Microsoft throws the big bucks behind its new Xbox console. How will the world react to this major announcement? Join Nick Thorpe for a trip back in time and find out…



NEWS MAY 2000

On 5 May, one of the world's most dangerous computer viruses began to spread across via email. Commonly known as ILOVEYOU due to the subject line of the emails through which it propagated itself. When opened, ILOVEYOU would overwrite a variety of files before sending copies of itself in the infected machine's email address book. At the height of the problem, tens of millions of machines were infected and Parliament, the CIA and the Pentagon all shut their email systems completely. The damages were estimated at over $5.5 billion. The virus originated in the Philippines, developed by Reonel Ramones and Onel de Guzman. Both men were arrested, but ultimately released without charge as the Philippines had no existing laws against writing malware.

The Philippines was in the news again later that month, as Reginald Chua hijacked Philippine Airlines Flight 812 on 25 May. Armed with a gun and a hand grenade, the man hijacked the domestic flight from Davao City to Manila, which was carrying almost 300 people including staff and passengers. After being denied access to the cockpit, Chua robbed passengers of their valuables before leaping from the plane at a height of 1,800 metres above ground, using a homemade parachute to break his fall. Three days later, Chua was found dead.



THE LATEST NEWS FROM MAY 2000

Just when everyone had calmed down over the Japanese launch of the PlayStation 2, new hardware fever swept the gaming world again when Microsoft formally announced its forthcoming Xbox console. Bill Gates himself was present at the unveiling, which featured a number of technical demonstrations, but little in the way of confirmed games. In fact, many details were still unconfirmed – not only was the striking silver 'X' design of the console design likely to shrink, but even the name was still considered a codename. The machine would boast PS2-beating specs including the unusual addition of a hard disk, which we were assured would be used for additional content and enhancements rather than PC-style patches.

Microsoft's announcement represented the first American entry into the console market since the days of the 3DO and Atari Jaguar, but with $250 million earmarked for launch marketing, the press instantly took the machine far more seriously. Though *Edge* considered it too early to judge the Xbox, it noted that "with strong support from leading third parties and excellent tech specs, Xbox is shaping up to be a hugely desirable console." Analysing the future of the next-generation console market, *Arcade* noted that Sony's dominance would be threatened by "a two-pronged attack from Sega and the mighty Bill Gates", while Nintendo's forthcoming Dolphin would "continue to mine its niche market of innovative, mould-breaking games from the fevered imaginations of Rare and Shigeru Miyamoto".

Elsewhere, Sega's counterattack against Sony's machine had begun. "Sega steals show as Sony lacks lustre in Tokyo" was the headline which opened *Edge*'s report on the Tokyo Game Show. Roller-skating colourful graffiti-'em-up *Jet Set Radio* was "without a doubt game of the show, easily outshining many PS2 titles in gameplay and technology terms". Elsewhere, Capcom demonstrated *Power Stone 2* and *Marvel Vs Capcom 2*, both offering online play against the company's staff in Osaka. However, the big offering for those willing to rack up hefty phone bills was *Phantasy Star Online*. In North America, Sega announced plans to offer



[PlayStation] Sony's golf game returned for another 18 holes on PlayStation before moving to a new course.



Bill brought the big bucks to the console race, but could the market really support four competitors?

THIS MONTH IN…



Edge

Four devs working on Sega's *Jet Set Radio* were interviewed in this issue. When asked about challenges they found difficult to overcome, Smilebit's chief graphic designer Kazuki Hosokawa nonchalantly replied, "There is this chair of mine. It is too relaxing so I had a very hard time keeping awake."



Arcade

One man not taken with Microsoft's new Xbox was 3DO's Trip Hawkins. "Every 'consumer' initiative driven by Microsoft has been a disaster," said the outspoken CEO. "I have known Bill for 20 years and he has never shown any evidence of having any understanding of consumers, entertainment or games." Ouch!



Computer & Video Games

"Rare has messed up with *Perfect Dark*," said Luke Nardori in the mailbag. "Rare should have set the game around a conflict like WW2 or the Gulf War, and also upped the gore level for extra realism." Publishers agreed, and spent the next 17 years catering to him.



[PS2] *Tekken Tag Tournament* looked awesome, but offered little in the way of new ideas or content.



[N64] There's nothing like a *Pokémon* game to boost a console late in life, as N64 owners discovered.

free Dreamcast consoles to anyone signing up for a two year subscription to the Sega.net ISP, with existing owners offered a $200 rebate on their hardware. This bold offer represented a discount equivalent to nine free months of the $21.95 service.

The first batch of PS2 reviews were in, and they were not as positive as the hype might have had you expecting. "There's nothing here that could be regarded true next-gen material," claimed *Edge*'s 6/10 review of *Tekken Tag Tournament*. *Ridge Racer V* was less well regarded, receiving 5/10 in a review which condemned the game as "a mostly soulless, unengaging and half-hearted." *Computer & Video Games* and *Arcade* both liked Namco's racer more, offering it 5/5 and 4/5 respectively, but had grievances elsewhere. *CVG*'s Les Ellis hated both FromSoftware's RPG *Eternal Ring* and Koei's strategy *Kessen*, offering each a miserly 1/5. Meanwhile, *Arcade*'s Nick Jones opined that "it's about time that Capcom called it a day with the *Street Fighter* games," offering *Street Fighter EX3* 2/5.

Elsewhere, the approaching summer season ensured slim pickings when it came to software for the existing formats. *Everybody's Golf 2* was the most exciting thing around for PlayStation owners, drawing a 4/5 review from *Arcade* and a later 9/10 review from *Official PlayStation Magazine*, though *CVG*'s reviewer wasn't quite as enthused and only offered 3/5. *N64 Magazine* went crazy for *Pokémon Stadium*, the battle simulation game which allowed you to import your critters from the enormously popular Game Boy cartridges, awarding the game 90% in a massive 12-page review. The game also offered a selection of minigames and the chance to play your Game Boy *Pokémon* carts on the big screen. Unsurprisingly, it jumped straight to the top spot in the N64 charts, despite less enthusiastic reception elsewhere – despite declaring that "seeing your 2D monsters come to life in the world of N64 is something akin to watching your first child being born," *Arcade* settled for a middle-of-the-road 3/5 score.

The best thing on offer for Dreamcast owners this month was Bioware's *MDK2*, the sequel to Shiny Entertainment's bizarre PC and PlayStation shoot-'em-up. Now featuring new characters Doctor Hawkins and the six-limbed dog Max alongside the original protagonist, Kurt Hectic, the game offered more variety and a similar sense of humour when compared to the previous game, but was criticised for a difficulty level best suited to masochists. Gory first-person shooter *Soldier Of Fortune* was the big



[Game Boy Color] The handheld *MGS* was just as tense as its 32-bit cousin, and the best game in a quiet month.

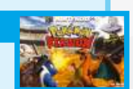
deal for PC, earning 7/10 from *Edge* and 4/5 from *Arcade*, the latter warning that "you may feel compelled to scrub your body after playing. But perhaps the most critically-acclaimed game of the month was *Metal Gear Solid* for the Game Boy Color, awarded the full 5/5 by both *CVG* and the Planet Game Boy section of *N64 Magazine*. The excellent stealth game offered a completely different story to its PlayStation namesake, and reprised the top-down game design of the MSX *Metal Gear* games.

What would June hold – new Xbox details, or maybe the Dolphin reveal? Find out in our next issue, fellow time travellers… *

CHARTS

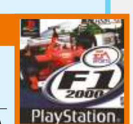
MAY 2000

NINTENDO 64



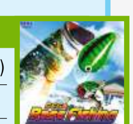
1. Pokémon Stadium (Nintendo)
2. Super Mario 64 (Nintendo)
3. Ridge Racer 64 (Nintendo)
4. The New Tetris (Nintendo)
5. Tony Hawk's Skateboarding (Activision)

PLAYSTATION



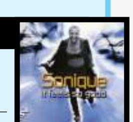
1. Formula One 2000 (Electronic Arts)
2. Gran Turismo 2 (Sony)
3. Toy Story 2 (Activision)
4. Tomb Raider: The Last Revelation (Eidos)
5. Fear Effect (Eidos)

DREAMCAST



1. Sega Bass Fishing (Sega)
2. Crazy Taxi (Sega)
3. Resident Evil 2 (Eidos)
4. Tomb Raider: The Last Revelation (Eidos)
5. Rayman 2: The Great Escape (Ubisoft)

MUSIC



1. It Feels So Good (Sonique)
2. Reach (S Club 7)
3. It's My Life (Bon Jovi)
4. Day & Night (Billie Piper)
5. Don't Call Me Baby (Madison Avenue)


NIK
52



Cadash

THIS IS PROGRESS

» RETROREVIVAL

» ARCADE » TAITO » 1989

The rise of the RPG in Japan can't have been a pleasant thing for arcade game designers to see. In the West, making arcade games that fit with the tastes of home console players is easy, because driving and shooting are always popular. But RPGs are everything that arcade games aren't – long, dialogue-heavy, and prone to relying on character skill rather than player skill as a means of determining progress.

Of course, arcade game designers did try to work RPG elements into their games, and *Cadash* is one of the results of that drive. It adopts the platform-RPG action of *Zelda II* and *Wonder Boy In Monster World*, meaning that you'll gain experience and weapon upgrades over time, rest at inns for health boosts and chat to locals for hints. However, combat takes place in real time so your skill is still the key determining factor in your success against enemies like Black Pudding, the boss in this screenshot.

That sense of progression is why I like *Cadash*. It might have been forgotten by much of the gaming public, despite its presence on certain Taito compilations, but I've always been fascinated by arcade games which offer a sense of progression beyond the usual quick thrills. While I can't carry around my *Cadash* progress – like with the custom *Initial D* cars or *Ghost Squad* guns where progress was held on memory cards in my wallet – I do like settling down for a session of hacking through baddies knowing that my character will have developed by the end. *

Virtua Fighter

The characters in this revolutionary game might look boxy today, but in the mid-Nineties they were the most convincingly animated characters arcades had ever seen. Join Nick Thorpe to find out how Sega AM2's developers brought a whole new level of realism to the fighting genre…



In The Know

- » **PUBLISHER:** SEGA
- » **DEVELOPER:** AM2
- » **RELEASED:** 1993
- » **PLATFORM:** ARCADE
- » **GENRE:** FIGHTING



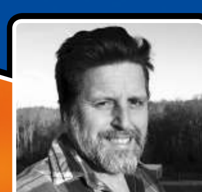
If you ask what the first 3D fighting game was, most people with any kind of a clue will tell you it was *Virtua Fighter*. Even the Academy of Interactive Arts And Sciences, when detailing its special award to Yu Suzuki, describes the game as having spawned the 3D fighting genre. The only problem with that is that it isn't strictly true.

You've probably never played *4D Sports Boxing*, a 1991 sports simulation from Distinctive Software. It wasn't a bad game back in its day – the low-polygon fighters looked a long way from human, but moved pretty convincingly. Still, it failed to make a lasting impact on the market; 3D boxing games wouldn't be popularised until the arrival of 3D-capable consoles later in the decade. Sega had also made a couple of attempts at introducing some form of 3D fighting game to the market, albeit without the benefit of polygons. *Holosseum* simulated a 3D environment using a curved display and is best forgotten, while *Dark Edge* used sprite scaling to simulate depth, and offered players full

Fighting Coaches



YU SUZUKI
Director and producer



JEFF BUCHANAN
Designer



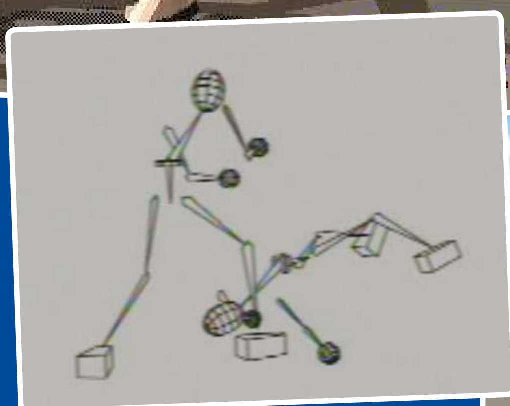
MICHAEL LATHAM
Executive producer, 32X version





» [Arcade] Despite a comparatively sparse move list, signature techniques, like Akira's tetsuzankou body check, are present.

» [Arcade] If you want to see Lau drive someone's head into the floor from every conceivable angle, *Virtua Fighter* will accommodate you.



» Simple wireframe dummies were utilised in testing animations – this is the aftermath of a simple throw.



eight-way movement. Neither game troubled arcade operators with overflowing cashboxes, though.

So *Virtua Fighter* wasn't the first 3D fighting game, but it was the first one that was actually fun to play and the first to make a major impact. How major? Well, even if we ignore the very direct influence on 3D fighting games throughout history, the sequels and their enormous sales, and the lasting fan love for the game, consider this: it was the first arcade game to be included in the Smithsonian Institute's permanent collection of videogames. Of course, the story starts at AM2, the internal Sega team that produced many of the company's cutting-edge arcade hits.

It might seem surprising that AM2 tackled a 3D fighting game, given that many of its hits were racing games and shmups. However, studio head Yu Suzuki was a fan of the genre – in a 1994 *Edge* interview, he expressed admiration for *Fatal Fury 2* and *Samurai Shodown* (but not *Mortal Kombat II*, which he believed "would have been a bigger hit if it hadn't been as violent"). Speaking to us today, the veteran developer, who is currently working on *Shenmue III*, remembers the difficulty of working with the Model 1 arcade board: "From the outset, I wanted to put movement to the human form in 3D, however, because of the heavy processing that was involved, the first game that we could make was a driving game," he explains. The tech itself had taken three years to develop, and 3D game development was in its infancy. "The experience gained from *Virtua Racing* then led into *Virtua Fighter*."

To be more accurate, some of the experience went into *Virtua Fighter* – AM2 was split into two departments following the production of *Virtua Racing*. Ten staff members moved onto the production of *Virtua Fighter*, while a smaller contingent began work on *Daytona USA* on the new Model 2 hardware. This resulted in a batch of new hires at Sega, including Tetsuya Kaku, who was dropped straight into this high-profile project. "Working on *Virtua Fighter* meant working at the forefront of 3D technology, but when I first joined the team, the game's looks paled in comparison to the 2D fighting games that were big hits in Japan," explains the programmer, who is still at Sega. But that wasn't his biggest worry, as he confides: "What concerned me most was working with Yu Suzuki as he has a reputation for his strict attitude towards work."

Someone who had no such worries was Jeff Buchanan, a former member of the US Marine Corp and artist on *Virtua Fighter*. Having met his wife while stationed in Japan, he was looking for work in the country and sought to put his art education to good use. "At the time, I didn't know that the guy who was interviewing me was Yu Suzuki," he explains. "He was looking to build up some foreign talent in the AM2 team – they had already hired a French programmer [Francois Yves Bertrand], and were looking at me for my background in art." However, this wasn't what ended up clinching the job. "It was funny, he looked at my stuff and said 'Yeah, I like your art, but I'm really interested in the fact that you listed a bunch of martial arts, and I guess you had hand-to-hand combat training in the Marines. We'd really like you to work with the ▶

Virtua Fighter

Developer Highlights

AFTER BURNER
SYSTEM: ARCADE
YEAR: 1987

VIRTUA RACING
SYSTEM: ARCADE
YEAR: 1992

VIRTUA COP (PICTURED)
SYSTEM: ARCADE
YEAR: 1994





animation team on making realistic motions for this 3D fighting game we're making.'"

Jeff's experience with karate and aikido was important, as what Yu Suzuki was trying to achieve was a relatively realistic simulation – despite his fondness for contemporary 2D fighting games, he was never interested in including their more outlandish techniques, like fireballs and teleportation. "Even a real martial art such as Quan Fa hides many fascinating qualities," reasons Suzuki. "I knew there would be complications in the pursuit of realism here, and that it would be a challenge to express those hidden qualities in that era of low-caliber graphics, but as an actual martial art, Quan Fa held an undeniable romance for me. I felt I had no choice but to take it on."

Was the kind of practical knowledge that Jeff had really that important? "This was back before motion capture, so all motion was created by hand by our motion designers. We ended up with a lot of unrealistic motion created by designers who had no experience in martial arts," Suzuki explains. His solution was unorthodox, but effective – he required his staff to take martial arts classes themselves. "With some basic punching and kicking practice, we were able to go into production with a team of people who grasped the mechanics involved in that kind of motion." Jeff recalls the story with a chuckle. "I don't think most of the guys were all that big on it!"

Jeff had the opposite problem – he was basically new to computers, with his only prior experience being a brief bit of training in BASIC programming at the US Department Of Defense. "Once I got the job, I got a two-week crash course from one of the guys on the team on how to work with the models that they'd

"We sat down and watched martial arts videos, we got up and filmed ourselves doing the moves"
Jeff Buchanan

build and the control points in SoftImage to animate a character," he explains. "After about two weeks of messing around, in that second week I'd made an attack animation. They stuck it in the game and it worked, and Yu-san was all happy. So was I – it was like, 'Okay, I can do this!' From there, I was working with the team on combinations. We sat down and watched martial arts videos, we got up and filmed ourselves doing the moves."

As you might imagine, animating a human body is a complex process, especially when done by hand, and Virtua Fighter's character models were highly detailed by the standards of the day – characters were made from 1,500 – 2,300 polygons, and could even move their fingers individually. "We had a basic ankle joint, a knee joint, the two hip points – both turning sideways and bending forward and back – another one halfway up the spine, two shoulder points, elbow points, the hands, plus a basic neck join and another one for moving the head," Jeff recalls. It was a world away from animating *Virtua Racing*'s car models.

Even creating a single punch or kick was quite a lot of work. "It was a little bit time consuming – some of the guys that were pretty good with the animation software could do it within just a few hours," Jeff recalls. "But the more complicated the move, especially if you had the body rotate in any sort of way, it took them much longer to deal with it. Of course, then there were issues of timing and refining things within the animation set for the programmers, so there was a lot of rework." One type of move proved to be more difficult than any other: throws. "Any of the combination motions, where a character would grab and spin and throw or roll with another character, those were the ones that gave us the hardest time," Jeff explains. It's no coincidence that these are amongst the most impressive and damaging moves, and also some of the trickiest to pull off.

Animation wasn't the only complication caused by the use of human characters. "As opposed to



» [Arcade] Kage can launch his opponent high into the air, leaving them helpless against a follow-up attack.



» [Arcade] Lau is arguably the best character in the original *Virtua Fighter* – fast, powerful and capable of easy Ring Outs.



Tale Of The Tape

Here are the key things you need to know about all of the combatants in the World Fighting Tournament

Lau Chan

This quiet man is devoted to achieving perfection in everything he pursues. Having achieved the distinction of winning the top prize at the world's most renowned competition for Chinese chefs, Lau is hoping to prove his mastery in the field of martial arts.

Fighting Style Koen-ken
Age 53
Birthplace China
Height 169cm
Weight 76kg
Blood Type B
Occupation Chinese chef
Hobby Chinese poetry

Wolf Hawkfield

This man of Native American descent lived a life in the woods as a lumberjack, until a pro wrestling promoter spotted him during a scouting trip. Wolf quickly achieved fame, going undefeated in the squared circle. He enters the tournament in hope of finding worthy competition.

Fighting Style Professional wrestling
Age 27
Birthplace Canada
Height 180cm
Weight 100kg
Blood Type O
Occupation Wrestler
Hobby Karaoke

Jeffry McWild

This fisherman's greatest opponent is not a fellow fighter, but the eight-metre long Satan Shark. In their last encounter, the fearsome fish nearly killed Jeffry and destroyed his boat. He enters the tournament seeking prize money to build a new boat.

Fighting Style Pancratium
Age 36
Birthplace Australia
Height 183cm
Weight 111kg
Blood Type A
Occupation Fisherman
Hobby Reggae music

Kage-Maru

This ninja has endured a harsh life. In his teenage years, his mother was kidnapped and disappeared without trace. Some years later, his village was destroyed and his father assassinated. Kage-Maru enters the tournament, seeking vengeance.

Fighting Style Hagakure-ryu Jujutsu
Age 22
Birthplace Japan
Height 173cm
Weight 64kg
Blood Type B
Occupation Ninja
Hobby Mahjong



Pai Chan

This action movie star is known for her changeable moods, but one that stays fixed is her disdain for her father and former trainer, Lau. She fled from home at 16 after her mother's death, disgusted that Lau's only cared for martial arts. Pai enters the tournament hoping to beat him.

Fighting Style Ensei-ken
Age 18
Birthplace Hong Kong
Height 166cm
Weight 49kg
Blood Type O
Occupation Action star
Hobby Dancing

Sarah Bryant

While investigating the circumstances surrounding her brother Jacky's racing crash, Sarah was captured and brainwashed. With her martial arts skills now supplemented with her training as a assassin, she is sent to the tournament with the goal of killing her brother.

Fighting Style Jeet Kune Do
Age 20
Birthplace USA
Height 168cm
Weight 54kg
Blood Type AB
Occupation College student
Hobby Sky diving

Jacky Bryant

Following a crash in the 1990 Indy 500, Jacky was injured and forced to undergo a rehab, part of which included martial arts training. His sister disappeared just as he discovered that his crash was no accident, and he enters the tournament seeking to solve these mysteries.

Fighting Style Jeet Kune Do
Age 23
Birthplace USA
Height 177cm
Weight 72kg
Blood Type A
Occupation Indy Car racer
Hobby Training

Akira Yuki

During WW2, Japanese infantry were trained in the Chinese martial art of bajiquan, better known in Japan as hakkyoku-ken, in order to improve their skills. The man who developed those techniques has passed them down to his son and heir Akira, who seeks to test his training.

Fighting Style Hakkyoku-ken
Age 25
Birthplace Japan
Height 176cm
Weight 76kg
Blood Type O
Occupation Kung-fu teacher
Hobby Kung-fu

Virtua Fighter



» [Arcade] Kage has got the trickiest moves in the game – this jumping two-footed kick starts from an innocuous forward roll.

Left In The Dojo

Characters that never made it to the tournament and other secrets



A lot of concepts explored during the development of *Virtua Fighter* ended up going unused. This isn't unusual, yet *Virtua Fighter*'s unused content is well documented through prerelease images and footage, official media and leftover data in the arcade game. For a start, half of the main cast was renamed during development. Lau was known as both Lee and Tao at various stages, Kage-Maru was Yagyu, Akira's surname changed from Ryuzaki to Yuki, and Jeffry was formerly Willie Roberts.

Characters also underwent design revisions. The book *Virtua Fighter Maniax* shows Pai in a skimpy 'race girl' outfit, as well as Jeffry with a flat-top haircut and Jacky with headgear.

However, the unused fighters are the most interesting of all. Fans may be familiar with Siba, who appears on early *Virtua Fighter* cabinet artwork and in prerelease screenshots, and was later featured in *Fighters Megamix*. He was to be renamed Majido Abdul in the final game, and can be found in the arcade version. Also lurking in the data is a US Marine who bears a resemblance to *Tekken* character Prototype Jack. Amusingly he was named Jeff Buckman, a definite nod to Jeff Buchanan ("I was getting a kick out of it, I was laughing my butt off," he confirms). Lastly, three versions of an unnamed character exist in the arcade game. Little is known about him, but fans speculate that he may be described by an unassigned character biography, which describes the Japanese college student and karate practitioner Takeru Ryushoji.

▶ cars, the human form has many joints which bogs down the processing, so high speed algorithms were needed. And besides that, the body-to-body collision processing was also complicated, creating a mountain of problems that piled up," recalls Suzuki. While Model 1's custom hardware was capable of spitting out polygons at an incredible rate, the 16MHz NEC V60 CPU at the heart of the system was somewhat dated, having been introduced in 1986. "One thing I recall is an issue related to CPU speed," confirms Tetsuya Kaku. "At that time, we had to design algorithms very carefully so as not to execute division with the floating-point arithmetic. If a bad algorithm was designed, it instantly influenced the code execution speed. My senior associate asked me to solve the issue, and in turn learn the various skills related with the program speed."

Despite the use of 3D graphics, *Virtua Fighter*'s action took place on a 2D plane like other fighting games of the time. The only point at which you were afforded control over lateral movement was when your character was knocked down – at this point, you could roll towards or away from the camera to avoid an incoming attack. This was a conscious choice on the part of the AM2 team. "The concept of 'Evasion' was considered since the first *Virtua Fighter*," notes Kaku. "It was partially implemented in *Virtua Fighter 2*, then officially implemented with the additional button in *Virtua Fighter 3*." According to Suzuki, the reason for not implementing it right away was because players struggled with the concept. "Everything we were trying to get across was a whole new challenge, so it was necessary to make the system as easily understandable as possible," he explains, before revealing that evasion wasn't the only feature from later games that was under consideration. "We could have added modified rings and undulation to the battlefield, however, as the learning curve for the player steepened, the repeat value lessened and players ended up quitting."



» [Arcade] Majido is the most well-known of the missing characters as he appeared in *Fighter Megamix* on the Saturn.

The only unorthodox aspect of Virtua Fighter's rules was the introduction of the 'Ring Out' victory condition. Each fight took place in a finite ring, and if you could force your opponent to leave it, you'd win the round – no matter how much health the opponent had remaining. "We trial tested several ways to decide victory, but when it came to trying out elements of Japanese sumo wrestling, I felt that it provided a nice sense of tension," explains Suzuki. "Upset victories could be had at the ring boundary, and I thought it was unique that play quality could vary by adjusting the ring size." Indeed, the tiny ring of Sudden Death bouts and the gigantic bonus stage ring change gameplay significantly, the former encouraging quick fights and the latter giving rise to more knockout victories.

Initial versions of the game used test models, prioritising movement over characters. "When developing the game, we first focused on adding as many moves and techniques as we could. Then we adjusted them accordingly, one by one," explains Kaku. "It's very sensitive work that takes hours, days, and

Conversion Cage Match

Virtua Fighter's various conversions graded and assessed



SATURN 1994

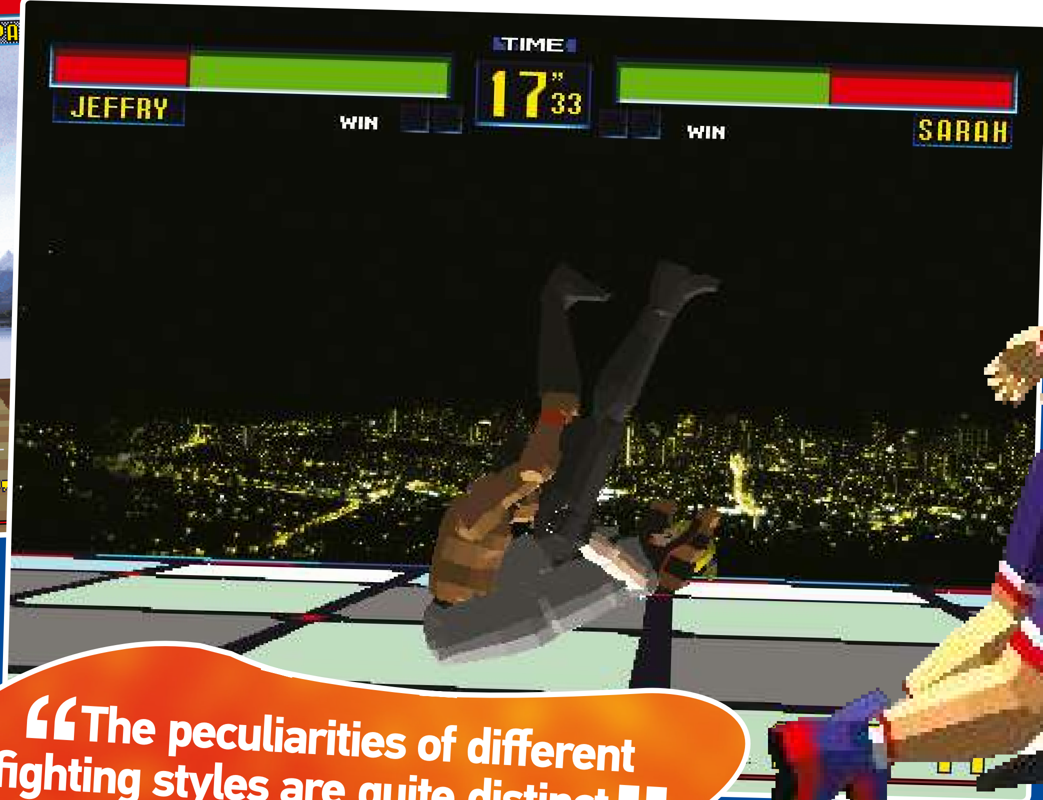
■ This early conversion plays well and retains much of the arcade look, and adds a nice remixed CD soundtrack. Sadly, it also suffers from terrible polygon drop-out problems – distant parts of the stage will often flicker in and out of view. It offers little over the original arcade game, too.



32X 1995

■ *Virtua Fighter*'s impressive animations and game design survived the conversion to 32X intact, even if the polygonal models had to be downgraded severely. This excellent version also includes some nice additional extras, including selectable camera angles and a tournament mode.





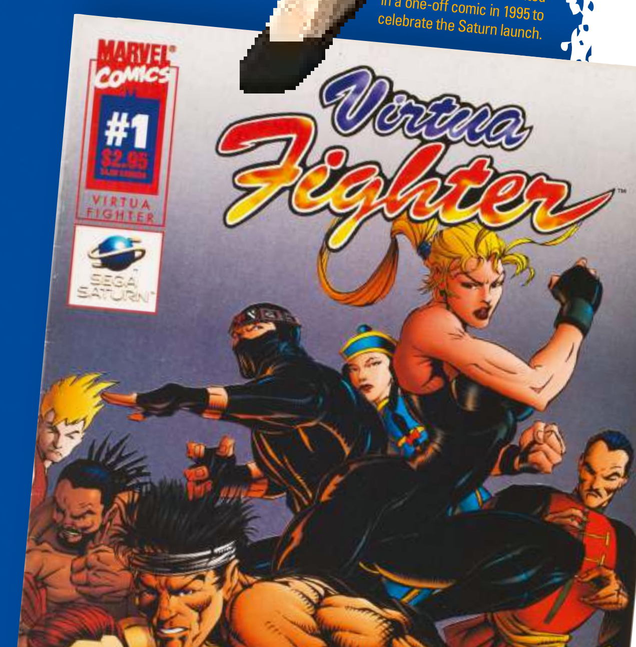


"The peculiarities of different fighting styles are quite distinct"
Yu Suzuki

weeks. I was overseeing the whole process, but other AM2 staff were in charge of the execution." When the characters did come in, the goal was to ensure that they felt significantly different from one another. "We did a lot of tinkering to differentiate the fighting styles and designs of the characters to bring about their individuality. The peculiarities of different fighting styles are quite distinct," Suzuki tells us. "Focusing first on Quan Fa (Chinese boxing), we then added other styles like pro wrestling."

By the time of the game's first public showing at the JAMMA show in August 1993, the game's mechanics were in place alongside a roster of eight characters ("I thought eight different character choices would be about right. For one, I just like the number eight," says Suzuki, in an interesting aside). These included the tricky ninja Kage, powerhouses Wolf and Jeffry, all-rounders Jacky and Sarah and Chinese martial artists Lau and Pai. But the series' most recognisable character was nowhere to be seen – the eighth character was a Saudi Arabian fighter by the name of Siba. "Jacky was initially positioned as the flagship character as long as I remember," explains Kaku. "Then, Akira was added as we were to release this title in Japan first. I think it was a logical decision." Akira wasn't the only addition during this period, as other new models were created and added to the game, but he was the only one to survive. "They wanted to put more in, but as time was coming down, it was like, 'Okay, we gotta get this wound up and get it out'", Jeff explains of the late cuts.

Virtua Fighter was released in December 1993. Initial impressions were favourable, but not incredible. "I played this game for over an hour and couldn't find any special moves to tempt me away from *Street Fighter II*" opined Rik Skews in a review for *Computer & Video Games*. "Sega should be praised for pushing back the boundaries of arcade games, as it did with the R-360, but that game was all look and no gameplay and this is sadly much the same," he concluded, awarding the game 83%. But over time, opinions began to change. "When *Street Fighter II* appeared in arcades in early 1991, some games magazines dismissed ▶



» A collaboration between Marvel and Sega resulted in a one-off comic in 1995 to celebrate the Saturn launch.



SATURN (REMIX) 1995

■ Responding to criticisms of the original Saturn release, Sega released *Virtua Fighter Remix* with fully-textured fighters and much more stable performance, but few other enhancements. Be wary of the Japanese Sega Net version – it won't boot without a modem present in the Saturn's expansion port.



PC 1996

■ The PC version is based on the Saturn's *Virtua Fighter Remix*. It offers a high resolution, 640x480 mode and the choice to use either textured or untextured models and stages, though the untextured stages aren't the same as arcade or Saturn *Virtua Fighter*. Modern machines will often run this game too fast.



PLAYSTATION 2 2003

■ *Virtua Fighter 10th Anniversary* is an odd hybrid. It features characters and moves from *Virtua Fighter 4 Evolution*, but takes visuals, music and rules from the original – so there are no throw escapes or sidesteps. US fans got it as a bonus in *VF4E*, but it was an actual release in Japan and a non-retail promo in Europe.

Q&A: Michael Latham

The former Sega Of America producer explains how the 32X conversion was made



During early reporting on the 32X, the press seemed split on whether or not *Virtua Fighter* would actually be coming to the system. Was there ever any concern over the hardware being able to handle the game?

I think that split came from the fact that the core *Virtua Fighter* team had little interest in doing 32X as a platform. I think they viewed it as a platform that mattered more for the US/Europe than Japan, which wasn't unfair given different market conditions. So the project was given to a B team within Sega which would use the core code from the arcade team. They were instructed at this point to do a proof of concept, and once the *Virtua Fighter* team saw it came close enough, and under pressure from the US and Europe, they agreed to let the title move forward.

Which aspects of the original game were prioritised during the conversion process?

Once the project passed the proof of concept [stage] the core *Virtua Fighter* team focused on other stuff. Joe Miller realised this and dropped by my office. He said we need some wins on the 32X, and *Virtua Fighter* was a key title. He filled me in on the fact we had a young independent team doing the port in Japan and he wanted someone who would push them to create more than just a port. He wanted to prove that the 32X could deliver more than had been seen, while we all worked on US originals for it.

So my first focus was direct the team to ensure we nailed the gameplay first and worry about arcade reproduction nearly last. I had my best guys to help – Eric Quakenbush, Erik Wahlberg, and Bill Person on the US side. Going chip to chip we would lose, but we could make the game fun, responsive, and give more features for a console because the Japan team was open to all ideas. They worked their butts off like no other team I had worked with. We shared a common love of fighting games and they didn't have the anti-EC view the *VF* core had.

Was there a push to offer 32X players something over the existing Saturn version?

Yes that push came from myself and the rest of the US team. We had learned a lot



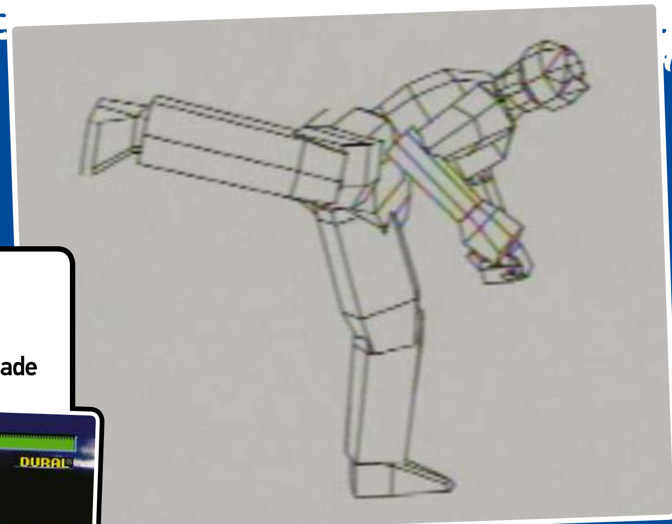
from *Eternal Champions*. We understood home console ports had limited long term replayability without adding competitive features. We also realised the arcade control of the camera was too limited and pushed to allow dynamic camera angles, and cheats allowed you to modify the physics of the game. So not only would the consumer get to play with this stuff it became a critical tool for our team to play balance and optimise the game on the 32X.

The 32X version of *Virtua Fighter* was well received, but arrived at a time when the hardware was struggling. Was the game seen internally as something that could help boost 32X sales, or had that ship already sailed?

It was viewed as critical and for sure helped give the 32X a much needed bump, but the other planned titles were slowed or cancelled for the platform and the rest is history. I wish we could have made it a launch title, it would have likely allowed me and other Omega members to ship the US titles as the second wave. Losing the likes of *Virtua Hamster* is a bummer to this day.

I have mentioned that Sega Of Japan was not happy with the US and Europe focus on *Eternal Champions*, especially the *Virtua Fighter* core team. Well here's something I haven't fully explained before. When we got ready to ship the product, the *Virtua Fighter* core team was shown the final version. They were beyond angry. They didn't like all the additions and the game balance our side created. So much so I was called into a meeting with Joe Miller and Tom Kalinske where Sega Of Japan said we could not ship this version, we would have to wait for a new version which would strip everything out the US side had the Japan team do. Joe Miller and Tom Kalinske were having none of it and got Sega Of Japan upper management to relent and ship our gold master as is.

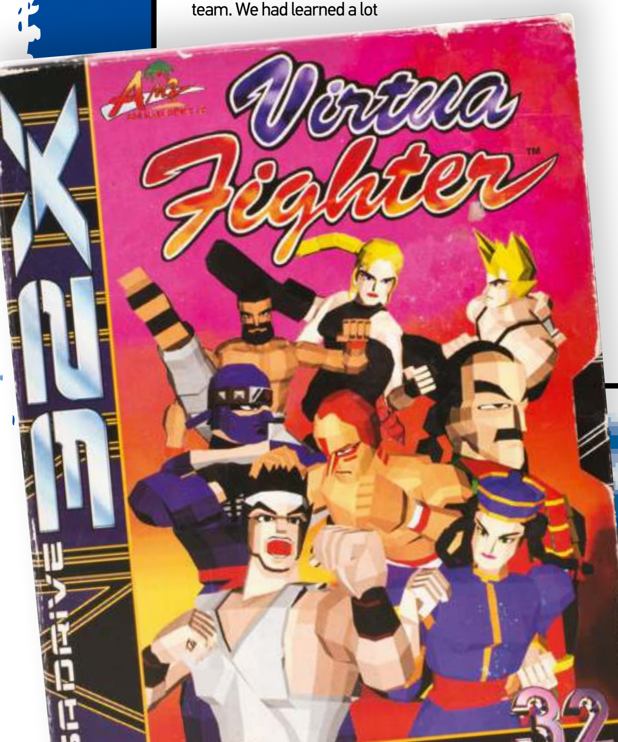
There was a deep price to pay for that day. A couple of months later *Eternal Champions 3* was killed by Sega Of Japan and the property was pretty much all but eliminated from Sega history. Now you know what was the last straw. I knew this risk but I bleed blue even now and I wasn't about to let down our customers who bought a 32X or any title that shipped with our names on it. I w+ould make the same choice today.

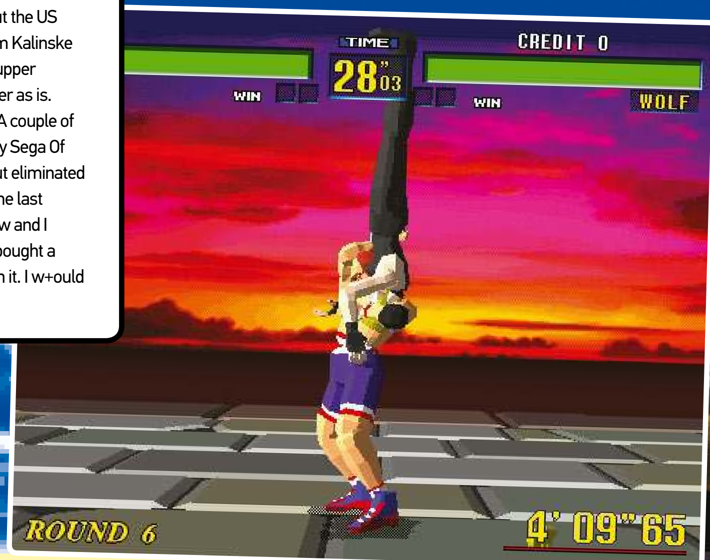


» Here's an early wireframe character model, demonstrating a kick animation.

it," remarked *Edge* in a preview of the Saturn conversion. "*Street Fighter II*'s playability took time to surface, but once its qualities became obvious, the game snowballed into a craze of gargantuan proportions. And many would say the same thing is now happening with *Virtua Fighter*," the article continued. "In recent months, Japanese coin-op fans have gone crazy over the game, and what was initially snubbed by many as being clumsy and shallow is showing that it also contains its fair share of hidden depth." Kaku remembers the emerging craze well. "I used to play *Virtua Fighter* in the arcade almost every day. I played with all of the characters, but my favourite character was Wolf," says the programmer. "I won 30 games straight against ordinary players!"

Indeed, as players discovered a wealth of special moves and mastered the then-unusual act of continuing to attack an opponent that had been knocked into the air, it became clear Virtua Fighter did have hidden depth. By the time a home conversion for the Saturn arrived in November 1994, critics had been won over. *Edge's* 9/10 review said that, "Although the characters look good in static screenshots, it's the animation that brings them to life," later noting them to be, "A well-balanced bunch, offering a choice of power, speed or agility." Other magazines were similarly impressed. "With combos to rival *Street Fighter, VF* adds to this with cheeky moves – you can juggle an opponent with a flurry of punches," noted Steve Merrett in a 96% review in *Mean Machines Sega*. Rad Automatic declared it to be "obviously the work of some strange supernatural force" in *CVG*'s 94% review. *Ultimate Future Games* declared it to be "The game that killed the 16-bit machines" in its own 96% review.









» [Arcade] Pai offers moves that intercept the opponent's punches and kicks, which are perfect against predictable players.

» Before producing the Saturn conversion, experiments in polygon reduction took place on Silicon Graphics machines.

> **"Virtua Fighter had few expressive polygons"**
> Yu Suzuki

The game did well in the West, but was hampered twice over. In the arcades, it wasn't as widespread as it could have been as it was an astronomical expense for all but the most wealthy of arcade operators – magazines of the time quoted deluxe Super Megalo sit-down cabinets selling for roughly £14,000. In the home, the high price of the Saturn hurt it, as did the appearance of the graphically impressive *Battle Arena Toshinden* as a PlayStation rival. But in Japan, *Virtua Fighter* wasn't just a game – it was a phenomenon. Top players like Shinjuku Jacky and Ikebukuro Sarah became notorious for their skilled tournament performances, and were tapped up to supervise detailed guide books on how to improve at the game. Then there were the tie-in products – the gameplay videos, the manga adaptations, the CD soundtrack, and later a full animated TV series. When *Famitsu* readers were asked to vote on their top 100 games in 2006, *Virtua Fighter* placed 39th. This put it ahead of many favourites, including *Sonic*, *Metal Gear Solid*, *Pokémon*, *Super Mario World* and *Tetris*. In fact, the only fighting games to make that list were *Street Fighter* and *Virtua Fighter* games.

Virtua Fighter's popularity was so great that as well as spawning a variety of direct sequels and spinoffs, Suzuki even considered using it as a launching point for his most ambitious project, a game then known as *Virtua Fighter* RPG starring Akira. "It was our first experience with a large-scale RPG, so rather than starting from scratch we thought it would be safer to build upon the reputation and elements of *Virtua Fighter*," he explains. "As we got further along in development, we judged that the content could be incorporated even as its own brand, so we separated the title from *Virtua Fighter* to make it into *Shenmue*. At that point, the main character was changed from *Virtua Fighrer*'s Akira to Ryo."



The legacy of Virtua Fighter extends for beyond its own direct lineage, though. Key staff member Seiichi Ishii left Sega after the completion of *Virtua Fighter*, and ended up becoming director and main designer for Namco's *Tekken*, which became the primary competition to Sega's 3D fighting series. He later founded Dream Factory, creating further 3D fighters including the *Tobal* games. *Dead Or Alive* was also strongly influenced by the early *Virtua Fighter* games, and acknowledged this directly with crossover characters Akira, Pai, Sarah and Jacky in the *Dead Or Alive 5* series. Even those games that didn't have the benefit of former *Virtua Fighter* staff owe the game a debt – the game's odd jumps, juggle combos, ring out victories and lack of projectiles were idiosyncracies in 1993, but many 3D fighting games in the years to come would follow the leader by including them.

Looking back at *Virtua Fighter*, it's clear that the staff appreciate the importance of what they had created, while being unafraid to note its shortcomings. "*Virtua Fighter* had few expressive polygons and was hamstringed with impotent machine power, causing low character aspect and angular features," says Suzuki. "It was quite a trial starting out with characters that looked like they were made from cardboard boxes. Bringing any kind of beauty to the female characters was particularly taxing, seen in how stiff Pai turned out!" But everyone needs to walk before they can run, and *Virtua Fighter* was an important first step. "By the time we got to *Virtua Fighter 2* we were able to use textures which helped bring everything together a bit better. It is quite something to consider just how unimaginable it was to get to characters as realistic as they are in the newest *Virtua Fighter* when they started out like that in the original *Virtua Fighter*," he adds.

For Kaku, the main issue was bugs. "A few moves and techniques can be performed using unexpected timing and button input. In a word… bugs. However, these bugs still maintain the game's balancing, which is very unusual. These little touches make me believe *Virtua Fighter* stands on its many unusual miracles," he notes, before explaining why he remains so fond of the project. "It was an exciting experience to work with such cutting-edge technology as a programmer. I could learn the inner workings of real-time CG before anyone else, which was a huge boon for my career after the project. Releasing the world's first 3D CG fighting game is my most cherished achievement."

Ah yes, the first 3D fighting game. *Virtua Fighter* might not actually hold that title, but everything beforehand is the domain of pedants and trivia buffs – *Virtua Fighter* is the first one that *mattered*, and that's why it's such an easy mistake to make. ★

Special thanks to Yu Suzuki, Franck Sebastien and Danny Russell for making this article possible.

HOW IT PUSHED THE LIMITS. . .



Parallax Scrolling

By 1990, 16-bit machines were showing off their parallax scrolling capabilities to impress the masses. But every level of *Flimbo's Quest* shows that with the right programming knowledge, the C64 could do a fine job of it too.



Smart Colour Design

The graphics in *Flimbo's Quest* were drawn with a great respect for the Commodore 64's limited palette. This screen uses just 11 of the 16 colours available on the system, and only nine of them are used in the gameplay area.



Enemies Everywhere

It can be difficult to push a large number of sprites on any 8-bit system, but the programmers behind *Flimbo's Quest* found a way. The game runs smoothly while showing four small enemies, one large enemy and Flimbo himself.



SID Spectacular

Special attention has to be paid to the music in *Flimbo's Quest*, as it runs during gameplay and still allows for sound effects. Not only that, but the soundtrack is catchy, well-composed stuff that shows the SID chip's strengths.







Flimbo's Quest

The developers might have been called Boys Without Brains, but there's serious coding knowledge here

» **PLATFORM:** COMMODORE 64 » **PUBLISHER:** SYSTEM 3 » **RELEASED:** 1990

By 1990, the Commodore 64 was starting to look just a little bit long in the tooth – despite being the world's most popular home computer, the 1982 technology was no longer impressive next to the 16-bit computers and the Japanese consoles that were starting to make inroads in the European market. But there was a lot that smart coding could do to close the gap, and the coders with all the best tricks could be found in the demo scene.

Over in the Netherlands, the Boys Without Brains group was doing good work in the demo scene. The group had moved into game production, releasing *Super Trucker* and *Hawkeye*, but *Flimbo's Quest* was to become their most famous production by far. Though the programming is credited to Laurens van der Donk, he has been clear in interviews that the game was a team effort, giving due recognition to Mario van Zeist and Jacco van 't Riet.

While the setting was original, much of the game design was transplanted from the previous game, *Hawkeye*. The gameplay saw young *Flimbo* trying to rescue his girlfriend, Pearly, who has been captured to provide life energy for the mad scientist Fransz Dandruff. In order to do this, he needs to traverse platforms and shoot enemies to gain letters, which will provide the secret to defeating Dandruff.



Though the game didn't do anything imaginative, it was visually impressive and highly polished for its time. The graphics, provided by Arthur van Jole, were so well drawn as to fool casual observers into thinking that the machine was capable of far more than its limited colour palette, and thanks to the coding skill of the Boys Without Brains team, parallax scrolling and multiple sprites were handled without a hint of slowdown or flicker. Johannes Bjerregaard and Reyn Ouwehand were tasked with working the SID chip and coaxed some memorable tunes out of the legendary sound hardware.

Flimbo's Quest became a well-known game due to its inclusion on a pack-in cartridge that also included *Fiendish Freddy, International Soccer* and *Klax*. Even being bundled with the ill-fated Commodore 64 GS couldn't dull the shine that *Flimbo's Quest* lent to the ageing computer. *


SCRA
Fighter
UFO (100 pts)
FUEL
Fuel (150 pts)
Rocket (50 pts)

AMBLE

In 1981 Konami's arcade game introduced a generation to the heady thrills of the horizontal shooter. Martyn Carroll looks back the coin-op that changed shoot-'em-ups forever

***S**cramble* **was the world's first side-scrolling shooter – and we state that without provisos or caveats.** There's no doubt some ancient game for the Commodore PET or Tandy TRS-80 that mixed elements of shooting and scrolling that we've overlooked, and of course there's *Defender* from Williams, released in 1980, the year prior to *Scramble*. Yet when we think of the definite side-scrolling shooters, such as *Gradius*, *Darius* and *R-Type*, the genre's traits can be traced straight back to *Scramble*. It's the granddaddy of them all – and *Gradius* is actually a direct descendant, as Konami classes *Scramble* as the very first game in the *Gradius* series, making it effectively '*Gradius Zero*'.

The key difference between *Defender* and *Scramble* is the scrolling. In *Defender*, the landscape tracked the player's movement, scrolling left and right as required, whereas in *Scramble* the scrolling was forced, pushing the player forever to the right, headlong into the action. This was no endless, point-scoring exercise, however. The game presented the player with a clear mission: evade the defences over multiple stages and destroy the enemy stronghold at the end – which was basically the blueprint for virtually every scrolling shooter that followed ever since. The ideas of having distinct 'areas' (the mountains, the cavern, the city) and fortifying them with both ground and air defences originated in *Scramble*. ▶



» [Arcade] So it begins. Clear the mountain and get ready to bomb rockets aplenty.

Fireball

Bonus Tower (MYSTERY)

Admittedly there was no hulking great 'boss' at the end of the sixth and final stage, but rather a small base that required precision flying skills to destroy. This finale was clearly inspired by the Death Star attack run in *Star Wars*, as players had to carefully navigate a 'trench' before unleashing a 'one-in-a-million' shot that would take out the base and spark wild celebrations (or at least a congratulations message in the finest broken English). Another staple that *Scramble* lacked was power-ups. The player's ship fired missiles and dropped bombs but its weaponry could not be upgraded. There was a fuel system instead, in which you had to keep the ship topped up by blowing up the fuel tanks on the ground. That's right, this was an unusual type of fuel – thought by leading petroleum experts to only exist in videogames – that you had to combust prior to consuming.



» [Arcade] Don't forget to keep your fuel gauge topped up by bombing the tanks below.

Although *Scramble* was hugely influential in its field, it was more than just a catalyst for other titles. Debuting in early 1981, the game became a massive worldwide hit for Konami. Records kept by Stern Electronics, which published the game in the US, reveal that in order to meet demand the firm manufactured more than 15,000 *Scramble* cabinets between March and August 1981 – a rate of production that even surpassed Stern's own hit shooter, *Berzerk*.

Konami's previous releases had been clones of established shooters, like *Space Invaders* and *Galaxian*, and now it had an original title that would be imitated itself. One early copy came from TOSE/SNK in the form of *Vanguard*, a title that scrolled in multiple directions yet retained the core shooting gameplay and even the fuel mechanic. *Cosmic Avenger* from Universal was another shooter that arrived in 1981 to cash-in on the success of *Scramble*. Unsurprisingly the game was bootlegged too, with titles such as *Explorer* from Sidam and *Strafe Bomb* from Omni ripping off the original code wholesale.

BLOW THE BASE

A quick stage-by-stage guide on how to beat Scramble



STAGE 1

■ During the opening stage, you should try and destroy every rocket, tower and fuel tank in order to rack up as many points as possible. Why? You are awarded a bonus ship when you hit 10,000 points and that will definitely come in handy later on.



STAGE 2

■ The cave is filled with UFOs which you need to shoot or avoid. Shooting is preferable, but you really need a high firing-rate in order to hit them, so hammer the fire button! Don't worry about the rockets as they won't launch on this stage.



STAGE 3

■ It's those great balls of fire. They can't be destroyed no matter how many times you hit them, so stay low in the 'valleys' and only ascend to avoid the hills. Only again the rockets won't trouble you so just bomb them for points.



» [Arcade] Despite what that kid at school told you, the fireballs cannot be destroyed. It's a playground myth!

Much the same could be said about Konami's own *Super Cobra*, which arrived just three months after *Scramble*. Running on the exact same hardware, the follow-up was essentially a much tougher version of *Scramble* that offered extra stages and ample opportunities to crash and burn.

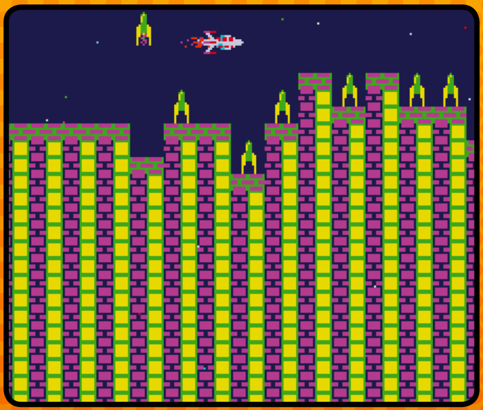
However the cloning that occurred in the arcades was nothing compared to what happened at home. The '*Scramble* variant' quickly became its own subgenre as just about every computer in existence had at least one unofficial version of *Scramble* available for it. A number of them (including one for the ZX81 published by Sinclair Research) didn't even bother choosing a sound-alike title and just went with '*Scramble*'! Although typical of the time, this was plagiarism on a massive scale. For reasons that are not entirely clear, Konami did not go about licensing the game on a wide scale as it later did with *Super Cobra* and its other hit of 1981, *Frogger*. All in all, there were just two official home versions of *Scramble*, for the Vectrex console in 1982 and the Tomy Tutor computer in 1983.

The Vectrex version was written by Paul Allen Newell, a developer working for Western Technologies, the California-based firm that designed the Vectrex hardware. "I had been hired to work on reverse engineering the Atari VCS to create games for it," he recalls. "That project got killed at the end of 1981. They immediately put the three programmers on the first three of the initial Vectrex games."

One of those games was *Scramble*, a game that Paul was already familiar with. "I had played it in the arcades and liked it, though most of my quarters went on *Tempest*. For the Vectrex version we had a *Scramble* arcade game put in the conference room with access to the switch that controlled the number of lives and/or whether collision detection was active so I could either play the game as a user or run a section over and over to get a feel of the different options and timing. It was a way to go through the whole thing and see everything without having to play. The key to making it accurate was how fast the scroll moved and how the spaceship's motion mapped with that. After that it was just matching to the topology exactly."

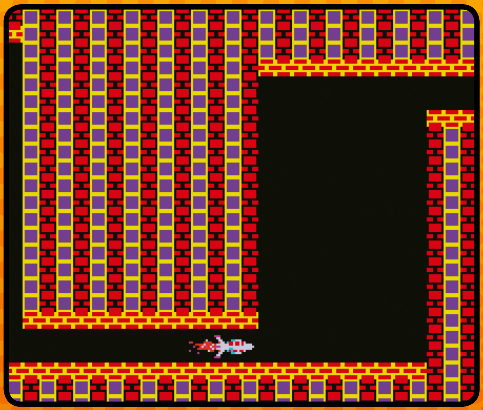
> **"Scramble was a very good fit for the Vectrex"**
> Paul Allen Newell

Paul's efforts paid off as the finished game was not only a faithful version of the coin-op but also one of the very best games released for the *Vectrex*. "I was very pleased", he says. "*Scramble* was a very good fit for the Vectrex as the vector display gave me much greater freedom of motion than raster. I would have preferred an 8K cartridge rather than 4K as there were a couple things in the arcade that I either ▶



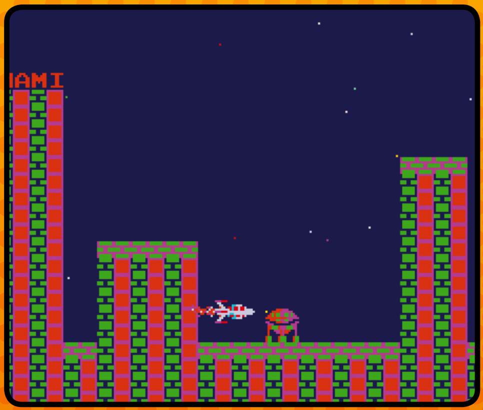
STAGE 4

■ Welcome to the 'city' stage, where the difficulty starts to spike. Rockets come back into play and some are difficult to bomb, so you'll need to pull off evasive manoeuvres. In all the excitement don't forget to keep your fuel topped up.



STAGE 5

■ This is the toughest challenge as you need to perfect your positioning throughout the 'maze'. When clearing tight vertical spaces first move all the way forward then pull back hard and move up or down as required. It's tricky.



BASE

■ Bombing the base from up above is almost impossible. You need to get right down so that you're almost touching it and then blast it. Start descending as soon as you pass the 'Konami building'. Once destroyed, pull up quickly and get out of there.

CONVERSION CAPERS

How the small number of home conversions squared up



VECTREX

1982

■ This delightful retooling of the game in vector form is one of the finest titles that's available for the Vectrex. The graphics lack detail, as you'd expect with the vector-based console, but the overlay really brings the game to life. Moreover, it plays brilliantly well and is a perfect fit for the Vectrex controllers.

TOMY TUTOR

1983

■ This home computer version, converted by Konami itself, suffers from jerky scrolling but control of the ship is fast and responsive so the gameplay is largely unaffected. The graphics and sound are authentic, and there's a nice 'extra' for anyone skilled enough to makes it to the end of the game.





PLAYSTATION

1999

■ Included as part of the *Konami Arcade Classics* compilation that was released in Japan and the US only. This is a very faithful rendition of the original game, although the difficulty level seems to have been slightly ramped up. The display has also been tweaked to suit the game's horizontal orientation.

GAME BOY ADVANCE

2002

■ *Scramble* returned in another *Arcade Classics* pack, this time for Nintendo's Game Boy Advance. The game scrolls vertically as well horizontally, to improve playability on the small screen, and this doesn't affect the gameplay too much. A version with updated graphics can also be unlocked.





XBOX 360

2006

■ This updated version of *Scramble* didn't exactly set Xbox Live Arcade on fire at the time, but in retrospect it's a fine update that lets you play the original coin-op with or without updated sound and graphics. A peculiar 'co-op' mode was added with, two screens positioned side by side.

NINTENDO DS

2007

■ This *Konami Arcade Classics* collection once again featured *Scramble*, and this attempt is much more faithful than the GBA release that came five years before it, playing like a perfectly miniaturised version of the original coin-op. The addition of a rapid-fire button makes playing the game easier.

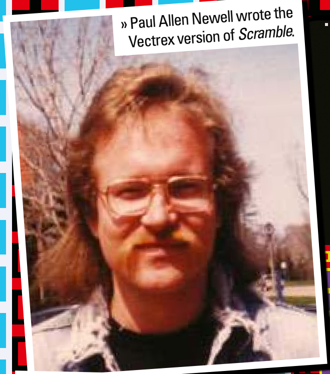


▶ couldn't add or subtle enhancements I couldn't make. Mostly collision detection and detail in data for everything in the scroll. Not to mention it would have been done quicker as a large part of my work was compressing the size without destroying the integrity of the game. 8K cartridges were available but the costs were a bit prohibitive at the time."

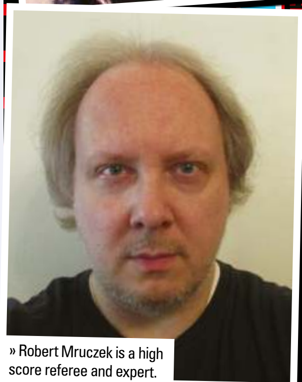
The vector display ensured that the scrolling was silky smooth – something that couldn't be said about the other official version for the Tomy Tutor. The game, which was developed by Konami, suffered from choppy scrolling but it was otherwise faithful to the original. However those that made it to the end were in for a surprise. There was no static base waiting to be bombed. Instead, the player was transported to a static screen where the base was suddenly 'alive', moving up and down the right-hand side of the screen. Between you and it were three columns of regenerating fireballs that you had to quickly blast away in order to clear a path and finally hit the base. The original *Scramble* coin-op may have lacked a boss battle but Konami added one to the Tutor version, and with it the groundwork for *Gradius* was complete.

Super Cobra was released as the follow-up to *Scramble* but the true sequel was of course 1985's *Gradius* (or *Nemesis* as it's known in some regions). Machiguchi Hiroyasu, the leader of the *Gradius* development team at Konami, has gone on record several times to state that the game was initially

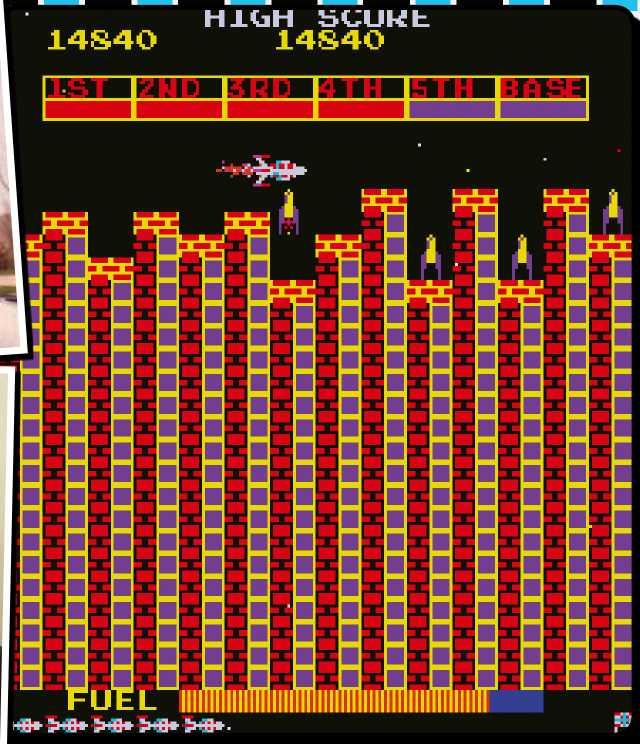




» Paul Allen Newell wrote the Vectrex version of *Scramble*.



» Robert Mruczek is a high score referee and expert.



» [Arcade] And another ship is lost to those sneaky rockets on the tricky 'city' stage.

"Scramble reaches its maximum difficulty in the third loop"

Robert Mruczek

developed as '*Scramble 2*'. This was largely because the team looked to adapt the code and assets from the original game. However, as the development progressed and new ideas such as the selectable power-up system and the 'Option' weapons multiplier were introduced – not to mention the move from the Z80 CPU to the 68000 – the game evolved into a discrete title of deserved repute. Yet the influence of *Scramble* was clear to see, particularly in the opening stage with its mountainous terrains (which was expanded to include spewing volcanoes). Also the final stage was titled 'Base', just as in *Scramble*, and the resemblance between the two stages was obvious.

***Gradius* went on to spawn its own series, with Vic Viper returning in four core sequels released between 1988 and 2004.** There were multiple distinct home versions too, plus spin-off series like *Salamander* and *Parodius*. Despite the popularity and influence of *Gradius*, Konami has not allowed *Scramble* to be forgotten and the original coin-op has become the bedrock of the firm's various retro compilations over the years. In 1999 *Scramble* appeared (along with *Super Cobra*) on *Konami 80's Arcade Gallery*, a multi-game collection initially developed for the arcades and later ported to the PlayStation. It then featured on *Konami Collector's Series*, a six-game pack for the Game Boy Advance released in 2002. Here, a faithful version of the coin-op was complimented by a bonus update that featured updated graphics and the choice of three ships, each with different firing abilities. In 2007 it appeared on *Konami Arcade Classics*, a new collection for the Nintendo DS that paired it with *Gradius* and 13 other coin-op hits. The game also received a standalone release on Xbox Live Arcade in 2006, and was curated within Microsoft's short-lived Game Room service. More recently, *Scramble* has been released as part of the *Arcade Archives* series on PS4, alongside the first two *Gradius* games.

Like most games of its era, *Scramble* also lives on as a high score challenge. The mission finished with the destruction of the enemy base but the game would then return to the beginning and it became a case of how many 'loops' you could complete. High score expert Robert Mruczek explains: "*Scramble* reaches maximum difficulty in the third loop. At this point in the game, fuel consumption is at maximum. It goes down pretty fast but all other elements of ▶



SUPER COBRA

Like Scramble, only played in the tenth level of hell

The follow-up to *Scramble* appears to have been designed for the small subset of players who found the original too easy. It's basically the exact same game, only with the difficulty cranked up to ridiculous levels. Here, the enemy defences are faster, deadlier and much more numerous. To compound matters you have to guide your helicopter (a swap for the original's spacecraft) through 11 stages to reach the end, and the last two stages are tricky beyond belief. Fans of *Scramble* will smile at some of the twists – the UFOs now fire back at you, and some of the fireballs lock onto your position. There are also tanks on the ground that move into position before spraying the sky with fire.

Unlike *Scramble*, *Super Cobra* was converted to many home systems, including early consoles like the Videopac/Odyssey 2, Atari 2600 and Intellivision (the game was also one of only four titles released for the Entex Adventure Vision). The MSX and Atari 8-bit versions are the standout attempts, although they both replicate the killer difficulty level of the original coin-op. In recent years the game has appeared on various compilations alongside *Scramble* and other Konami arcade hits.



UNOFFICIAL AND UNAPOLOGETIC

Ten of the best Scramble clones that invaded home systems and blasted onto your screen



CAVERNS OF MARS II
ATARI 8-BIT, 1981

■ The original *Caverns Of Mars* was an interesting spin on *Scramble*, where the screen scrolled vertically instead of horizontally. The sequel (also known as *Mars Mission II*) was a far more blatant copy of the coin-op. The graphics were well done but a little on the large side, so it was often difficult to manoeuvre your ship through tight spaces.



PENETRATOR
ZX SPECTRUM, 1982

■ A complete change of pace for the team that developed *The Hobbit* adventure game, this *Scramble* clone was an early gaming highlight on the Spectrum. The graphics were basic and prone to flickering, but the gameplay was all there. And the best bit: it featured a built-in landscape editor which you could use to create your own rocket-strewn stages.



SKRAMBLE
VIC-20, 1983

■ There were several *Scramble* clones for the VIC and this one from Anirog was the best by some margin. It no doubt helped that the game required 16K memory to run, allowing all of the stages and most of the features from the coin-op to be squeezed in. If you had an unexpanded VIC then this was ample justification to get a RAM pack.



SKRAMBLE
COMMODORE 16, 1984

■ Anirog converted its earlier C64 version to the C16 and the results were surprisingly good. The choppy scrolling was fixed and all of the stages were squeezed into 16K. The only downside was that the game played at a fairly sedate pace, reducing the excitement levels somewhat but not spoiling what was overall a solid *Scramble* variant.



DEATH STRIKE
ATARI ST, 1987

■ Originally developed for the Sinclair QL (and being the first title to successfully implement full-screen scrolling on the system), this enhanced version provided the ST with a faithful version of *Scramble*. In an interesting move, your ship would automatically return to the left of the screen and instead the 'back' button was used to drop bombs.



ROCKET RAID
BBC MICRO, 1982

■ Classic coin-ops often translated well to the Beeb and this release from Acornsoft was no exception. It really was a showcase title, proving that the outwardly stuffy system could cut it as a games machines. If anything it was perhaps slightly too fast, making what was already a tough challenge even trickier. It was impressive nonetheless.

NEPTUNE
APPLE II, 1982

■ Here's a twist. This was obviously a *Scramble* clone yet the action was relocated to the ocean depths, so rather then dodging rockets and shooting UFOs you were battling various denizens from the deep. Some quirks – your bombs dropped behind you rather than in front – don't detract from what is a decent shooter from coder Nasir Gebelli.



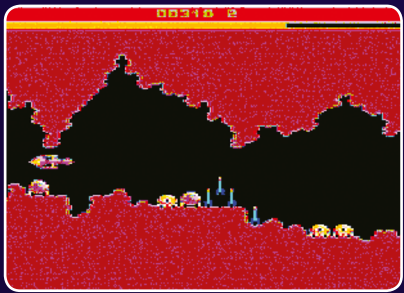


SKRAMBLE
COMMODORE 64, 1984

■ *Scramble* clones were also plentiful on the C64. Both Anirog and Rabbit Software called their attempts *Skramble*, and it's the Rabbit version that takes the crown due to its smooth-scrolling landscape (the Anirog release featured a choppy character scroll). In an extra cheeky touch this unlicensed version played a rendition of the *Star Wars* theme!

STAR AVENGER
AMSTRAD CPC, 1984

■ This fine version for the CPC expanded on the original, offering ten different stages (all of which could be selected from the start, for practice purposes) and a few surprises along the way. There were five difficulty settings, too, making this one of the more generous clones available. Kuma also put out a rather wild version of this for the MSX.





SCRAMBLE
ATARI 7800, 2012

■ In recent years *Scramble* has been ported to some of the systems that didn't receive a version, official or otherwise, back in the day. This homebrew release by Bob DeCrescenzo provided the Atari 7800 with an authentic conversion of the coin-op that's a blast to play. There's also a version for the TI-99/4A that's worth taking a look at.

MAKING ROCKET RAID

Jonathan Griffiths reveals the story behind his excellent Scramble clone Rocket Raid for the BBC Micro



So how did you get into games programming?

I got into programming while at school in Dover. I started writing games in my spare time (when I probably should have been revising) and, along with some friends, we formed Paranoid Software. We took out a small ad in *Personal Computer World* and sold three games! It didn't even cover the cost of the ad. Then I found out that I had failed my A-levels and so wouldn't be going to university. A friend then suggested writing off to Acornsoft for a job, and on a whim I sent a tape of some of the games. Luckily, David Johnson-Davies at Acornsoft liked the games and offered me a job in Cambridge.

What's the story behind *Rocket Raid* and how it got made?

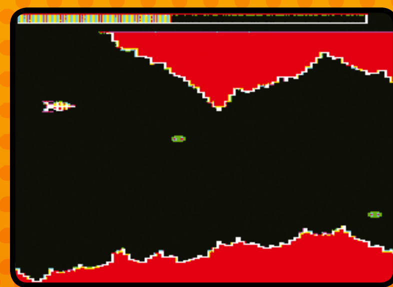
When the new BBC Micro became available in limited quantities, myself, Tim Dobson and Neil Raine were looking for ideas for games to write. We played the various arcade machines in the local pubs and so divided up between us which games we were each going to write. We were given a very free hand by Acornsoft to do our own thing, which was lovely. I wrote *Snapper*, a *Pac-Man* clone, and then immediately wrote *Rocket Raid* in about three months in the autumn of 1982.

What's your opinion of the *Scramble* coin-op machine?

I was a fan of the original *Scramble* but I wasn't good at playing it. Mostly, I looked for the technical challenge of running the same game on the BBC Micro. As soon as I found that the 6845 screen processor could do hardware sideways-scrolling, I knew it was possible. I set out to make my version as true to the original as I could. One aspect of the game I was quite proud of was the small lumps and bumps on the scrolling landscape which was done using a seeded random number generator. This meant I could store large amounts of landscape in a simple array.

With its bright colour palette, the Beeb seemed particularly suited to this sort of arcade blaster…

You're right about the garish colours! This was because the three electron guns for red, green and blue were either turned fully off or fully on, and so the other colours were simply combinations of these three colours. But the arcade machine had the same limitations so it looked true to the original, which was fine by me.



Can you recall any copyright issues due to the game being unlicensed?

I remember that *Snapper* had some issues, so I changed the sprites and that seemed to fix that one, but I was never asked to change anything about *Rocket Raid*, so I guess we got away with it. I tended to stay in the back room programming so avoided any of the politics. I certainly had fun writing the games back then, when I was 20 years old.

▶ the game do not become any more difficult in my opinion." Robert also reveals that the version published by Stern in the US is more difficult than the regular Konami version. "The Stern version is much harder. The fuel consumption is vicious, especially in the third loop where missing a fuel tank can be catastrophic. Worst of all is the game's occasional propensity for a glitch to occur and a key fuel tank is not where it's supposed to be. In the Konami version this is mostly recoverable but in the Stern version you can kiss your ship goodbye."

Robert currently holds the *Scramble* high score record (on original arcade hardware) with a haul of 1,147,580 points achieved in 2001. This was a far cry from when he first encountered the game with his school friends. "When we started playing the game it took a bit of getting used to," he says, referring to the dual fire buttons. "We initially had one person moving and firing laterally while a second person manned the bomb button!"

Robert's personal best score hovered around the 330,000-340,000 range for years and it would take a crucial tip from a friend to help him break the one million point barrier. He says: "During the Funspot/ACAM event where I set that score in 2001 I only played three games that day. The first game was not that great, around my previous personal best. The vast majority of my deaths occurred in the 'city' stage where there are several points that are difficult to navigate without a rocket hitting your ship. But Dwayne Richard was there and he had one key piece of knowledge about the game. Dwayne is one of the strongest classic arcade players around and he told me that only every third rocket would launch, meaning after a rocket launched at least the next two would *not* launch so that was a *huge* strategic advantage and removed a majority of the uncertainty factor for me. In the next game my score was mid-high 400,000 range and on the next I achieved the 1.14 million score." Robert's record score was verified by Twin Galaxies founder Walter Day who attended the event. Higher scores have since been recorded on MAME but not on an original arcade board.

If you're looking to score big on *Scramble* then Robert is happy to share his number-one playing tip. "Learn the arc of the bombs that you drop," he says. "And not just that, learn exactly where underneath your ship the bombs come from. This helps in extremely close-quarter situations in the 'city' stage if a rocket launches point-blank beneath you and catches you off-guard."

With that advice in our minds, let's go back to the beginning and revisit the world's first side-scrolling shooter. Let's see where *Gradius* and similar titles started. It's time to *Scramble*! ✱

Enemy Base (800 pts)



» [Arcade] Konami didn't shy away from including itself in an Easter egg.

KORO RIFT



IN THE KNOW

» **PUBLISHER:** EPYX

» **DEVELOPER:** LUCASFILM GAMES

» **RELEASED:** 1985

» **PLATFORM:** ATARI 8-BIT, VARIOUS

» **GENRE:** STRATEGY

A lot has been written about the North American videogames crash of 1983 – the bankruptcies, the huge financial losses and the withdrawal of firms from games development. But perhaps less discussed is the human cost of the collapse, and in particular, the mass layoffs of developers. Prior to the crash Noah Falstein was employed in the arcade industry, but events were about to dictate a career change. "I was working at Williams Electronics in Chicago on an arcade game called *Sinistar*," Noah remembers. "I had a friend who was working at a rival arcade company, and she heard that Lucasfilm was building a new games group. She was approached



» [Atari 8-bit] Careful blasting is required to take down an alien saucer without destroying a valuable hulk.

and listed me as a reference. So I got a call and I gave my friend a good reference, but they ended up not hiring her. About three months later, Williams had a setback – the industry was having a collapse, so I was out looking for work myself. I thought: 'Well, it wouldn't hurt to see if they are still looking.' As it turned out they were. That's what got me into Lucasfilm. *Rescue On Fractalus* and *Ballblazer* – their first two games – were mostly finished. I was just blown away by the quality of them, and in particular *Rescue*'s 3D world. I was so impressed with that technology that I thought it would be interesting to take it a step further."

After analysing *Rescue On Fractalus*, Noah concluded that in order to take things a step further, the game's aerial action would need to be a little more grounded. "As you flew over the landscapes, it often felt like they were being randomly generated. I thought that if we could have a game that had you moving slower, on the ground, you'd be able to appreciate the fact that the landscape had continuity. I've always enjoyed military combat games, and doing something in the range of tanks seemed like a good idea. It required a few modifications to make it work at ground-level, but nothing too complicated."

Having adapted *Rescue*'s landscapes for driving around, rather than flying over, Noah next planned his project's core gameplay, a process that relied on imagination as much as inspiration. "It was primarily

While interviewing at Lucasfilm Games, Noah Falstein was shown Rescue On Fractalus and was blown away. Rory Milne learns how Noah brought Rescue down to earth with his follow-up, Koronis Rift

original. To my knowledge, it was the first game that had the idea of defeating opponents and collecting their weapons and defences, and making your self stronger as you went along. But I was certainly inspired by a few games; I remember that *Star Raiders* really impressed me. I was also a heavy reader of science fiction at that time. I remember the Keith Laumer *Bolo* series about giant cybernetic tanks – that was part of my inspiration for the gameplay there. The idea of it being this abandoned graveyard of alien technology was, I think, partly inspired by the movie *Forbidden Planet*."

As well as writing up his ideas in a design document, Noah named his work-in-progress *Alien Tanknology*, although this was soon changed, as was much of his initial design. "Originally it was much more of a generic concept, and we refined it and worked on the world and the storyline. I was notorious for loving puns, so *Alien Tanknology* struck me as funny, but it didn't go over well with the others at Lucasfilm. I had done a game in college called *Koronis Strike*, which was an asteroid mining game, so I proposed *Koronis Rift* and that stuck. It sounded a bit like the kind of place that might exist in the *Star Wars* universe, and also echoed *Fractalus* a bit."

As with its name, the creviced stages in *Koronis Rift* – the titular rifts – also echoed *Fractalus*, in as much as the levels in both games depended on fractal graphics, as Noah explains. "The way the fractals worked was there were 16x16 or 32x32 points – each of those points was just a one-bit quantity showing altitude. The fractals took care of creating all of the extrapolations between those points: every mountain peak and every valley. Because the rifts were very simple bitmaps, I did them as text files. I would use those to spell out words and see how they looked when you drove around. I started with some very simple mazes and got gradually more complex with the higher levels. But a lot of it was really just trial and error. It was very difficult to visualise what it would be like to drive through one of those landscapes until it was up running on the screen. We had to do it blind and then assemble, and it might take ten or 15 minutes to be able to bring it up and test it, so it was a pretty tedious process."



» [Atari 8-bit] Lasers fly over Koronis as the surface rover engages in a firefight with a saucer.



DEVELOPER HIGHLIGHTS

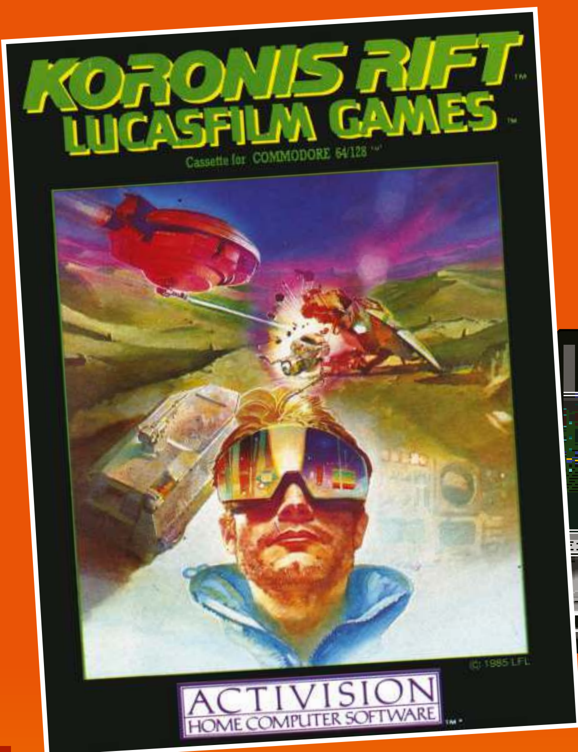
BALLBLAZER
SYSTEM: VARIOUS
YEAR: 1984

RESCUE ON FRACTALUS
SYSTEM: VARIOUS
YEAR: 1984 (PICTURED)

THE EIDOLON
SYSTEM: VARIOUS
YEAR: 1985

While Noah created levels for *Koronis Rift*, two colleagues designed alien craft, called 'hulks', and saucers to protect them, plus a droid called Psytek. "The graphics were done by a couple of different people, so they each had their own styles. I remember that Psytek – our animated robot – was one of the most expensive pieces of code. That was done by Jim St Louis; it was a combination of graphics and programming tricks. As a consequence, the look of that was quite different than what Gary Winnick did for the saucers and the rest of it. I don't think Gary did much sketching, I mean he joked that a lot of what he did was 'brick art'!"

Due to *Koronis Rift*'s host hardware, fighting the game's saucers and use of its second robot – a bot designed to loot hulks – had to be made sequential rather than simultaneous, although exploring Koronis's rifts while battling saucers was made possible, if tricky. "The animation for your robot and the saucer were using the same sprite technology, so it had to be one or the other," says Noah. "We didn't want releasing the robot to be a way to have the saucer go away. The navigation and shooting at the same time – that varied quite a bit from person to person. Some people had a knack for being able to remember the landscapes, and others used the radar detectors to find hulks."



> **"I didn't like games that forced you to go levels one, two, three, four…"**
> Noah Falstein

As well as radar detectors, Noah populated his game with a wealth of other power-ups, plus weapons and shields, which were located on hulks and activated via an icon-based control panel. "The idea of having a limited control panel and having to go up to the ship to change your weapons and shields was inspired by some of the role-playing games of the time – the idea that you might own a bunch of weapons and shields but you would have to go back to town to swap out the best ones. I'd hoped the panel would be self-explanatory, but *Koronis* was the first home computer game that I had designed from scratch, so the control panel made a lot of sense to me but was confusing to some."



» [Atari 8-bit] Science droid Psytek analyses an alien artefact on board the scout craft high above planet Koronis.

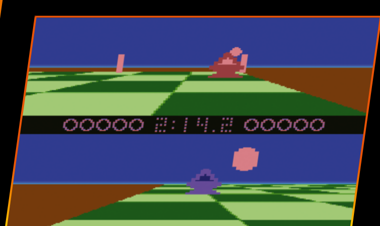
In terms of the effectiveness of the pick-ups that the control panel managed, Noah implemented an ingenious colour-based system, which was inspired by a Seventies board game. "I think the idea of having colours as kind of a coding for how the weapons and defences worked was because I was programming it on the Atari 800, and it had 128 colours at a time when four or 16 was standard. One of the other influences was a SPI board game called *Sorcerer* that used a system for magic where you had wizards that were associated with certain colours – and similar colours were strong and opposing colours were weak against other. That struck me as a really simple and elegant rule that had the advantage of being circular – there was no one strongest weapon or defence."

In keeping with his game's strategic combat mechanics, Noah also shaped *Koronis*' gameplay to produce something more thoughtful than a simple shooter. "The navigating of the landscapes, learning the rifts and how it all fit together seemed to fit in well with having to make strategic choices about what to raid and what types of weapons to use. And you could skip over chunks of the rifts; I didn't like games that forced you to go levels one, two, three, four, and if you got stuck then the game was over. I liked the idea of being able to jump ahead a bit but have the difficulty increase so if you jumped too far it was essentially self-limiting."

Despite, or perhaps because of, Noah's background in arcade game design, the designer felt strongly that *Koronis* needed an ending, and so he devised an ultimate objective of powering-up over levels before taking out an alien base. "I think that was really just a sense that it would be nice to build to a climax and actually have an ending to the game, because so many of the games at that point simply just kept going and

LEGENDARY LUCASFILM

More great titles from Lucasfilm's game division



BALLBLAZER

■ A futuristic first-person take on one-on-one soccer, *Ballblazer* is played in high-speed vehicles and includes tackling, blocking and moving goal posts. Considering its high tempo, *Ballblazer* could have been disorienting, but its camera constantly rotates to face the ball, which keeps the focus on the gameplay.



RESCUE ON FRACTALUS

■ Set on a hostile alien world, *Fractalus* is, for the most part, an aerial rescue mission, but it also includes a shoot-'em-up side objective with targets like mountaintop gun emplacements and kamikaze saucers. Thanks to George Lucas, *Fractalus* also features gruesome alien foes masquerading as downed human pilots.



THE EIDOLON

■ Although its first-person cave system repurposes the fractal visuals pioneered for *Fractalus*, *Eidolon* is more 'science fantasy' than its science fiction predecessor. The game is littered with colour-coded weapons, and similarly-hued monsters, which guard diamonds required to beat *Eidolon*'s dragon bosses.



MANIAC MANSION

■ Inspired by a dislike of typing commands into text adventures Ron Gilbert and Gary Winnick's *Maniac Mansion* reinvented the genre by swapping text inputs for cursor-selected commands. *Maniac Mansion*'s puzzles are satisfying to solve, and its oddball cast are genuinely amusing.



» [Atari 8-bit] Koronis is bathed in a magenta hue as the surface rover's lasers target a nearby saucer.

getting harder. Also, *Return Of The Jedi* had come out in 1983. The idea of having the equivalent of a Death Star to destroy was part of the influence as well."

Minimal in-house playtesting followed, with Noah being the only person to play *Koronis Rift* through to its end before the game's launch, which the developer remembers as being more successful outside its home market than it was stateside. "It was a moderate success for us but not a huge success. We marvelled at the fact that most of our games sold significantly better in Europe than they did in the US. We were always a bit frustrated that we weren't getting better sales in the US and couldn't quite understand why they weren't catching on more. The reviews were fairly positive, and word of mouth was pretty good – Lucasfilm was so well known because of *Star Wars* and *Indiana Jones*."

But while Noah has regrets over the response to his game on its release, the developer is far happier with the long-term appreciation of *Koronis Rift* and offers no specific alterations given hindsight. "If I could go back and make changes, even with the capabilities of the machines at the time, there are certainly quite a few things I would do differently. But given the resources we had and the experience we had, I'm pretty satisfied with the way it turned out. I'm quite flattered that those early games that I worked on are still being played – even more, are being played by people who weren't even born when the games were made." *

Many thanks to Noah for revisiting *Koronis Rift*.

CONVERSION CAPERS

Did the other versions better the Atari 8-bit original?



COMMODORE 64

■ Given that the C64 *Koronis* was converted in-house, it's unsurprising that Ron Gilbert's adaptation is an extremely accurate translation. Its most obvious deviation is that the planet Koronis is depicted in shades of grey instead of green, but, by way of compensation, Ron's port boasts more satisfying sound effects.



APPLE II

■ The other Lucasfilm conversion, Randy Farmer's Apple II port is remarkably close to the original, given its host hardware. The main concessions are a black-and-white planet Koronis and minimal sound effects, but the game's colourful hulks, impressive speed and faithful gameplay make up for these minor failings.



ZX SPECTRUM

■ Released two years after Lucasfilm's original game, the Spectrum *Koronis* looks and sounds as good as could be expected, given its need to avoid colour clash and the constraints of single channel audio. The game's convoluted controls are less forgivable, but thankfully its gameplay is faithful to the original.



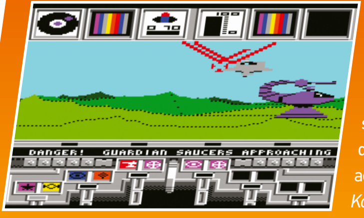
AMSTRAD CPC

■ This could so easily have been a lazy Spectrum port, however it's anything but. The Amstrad *Koronis* employs the system's multicolour mode, and it arguably depicts the planet *Koronis* in more appealing hues than the original. It's also improved in terms of audio, while accurately recreating its compelling gameplay.



MSX2

■ In some respects a disappointing conversion, in as much as the MSX2 is capable of much higher resolution visuals than are seen here. In fact, the MSX2 *Koronis* has blockier graphics than the Atari 8-bit original, and it makes no audio improvements. More importantly, however, it reproduces the original's gameplay perfectly.



TRS-80 COLOR COMPUTER

■ A mixed bag, although overall a good effort, the CoCo *Koronis* certainly looks the part, but it struggles to animate the rifts of Koronis as smoothly as the original. It also lacks in the sound department. Beyond these failings, though, it accurately replicates the gameplay that makes *Koronis Rift* a classic.



ZAK MCKRACKEN AND THE ALIEN MINDBENDERS

■ *Maniac Mansion*'s point-and-click system was reused in *Zak McKracken*, which pursues a quite different storyline. Combining *Maniac Mansion*'s humour and puzzles, *Zak McKracken* tasks a hack journalist with saving Earth from an alien plot to stupefy the human race.



Double Dragon

» DEVELOPER: Technos **» YEAR:** 1987 **» COST TODAY:** £200+

It's safe to say that *Double Dragon* didn't invent the 'wandering down the street punching thugs' genre – *Kung Fu Master* and *Renegade* were flying the beat-'em-up flag beforehand. However, there was something a bit special about *Double Dragon* – from the moment you saw the Black Warriors gang attack and kidnap Marian, you were more invested in rescuing her. Of course, co-operative gameplay set *Double Dragon* apart from rival games in the genre too, and it set up a memorable final confrontation in which Billy and Jimmy Lee faced off for the affections of the damsel in distress. The game's success inspired a wave of imitators including the likes of *Final Fight*, as well as a multitude of home conversions and arcade sequels, kicking off a golden age of beat-'em-ups that has yet to be matched.

Double Dragon was distributed by Taito, and came housed in custom variants of the company's GTC-100 universal cabinets, featuring *Double Dragon* bezel and control panel art as well as a marquee. As these cabinets were built to be easy to convert into new games, it's quite common to see other late-Eighties games with the old control panel and the distinctive twin dragons framing the screen.



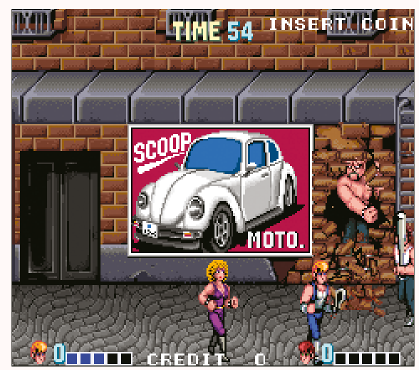




Double Dragon fact

■ The custom board for *Double Dragon* is very complex. Rather than using an expensive 16-bit CPU, *Double Dragon*'s main program runs from two 8-bit CPUs, with a third CPU dedicated to driving sound.

STANDOUT MOMENT **Abobo's Big Entrance**



Of all the enemies in *Double Dragon*, the big bad Abobo is the one that draws the most attention to himself. He's a bit of a terror whenever you see him, and you can instantly tell that he's more dangerous than the average grunt just from the sheer size of him. But to really hammer the point home, Technos decided to give him a memorable debut. As you battle your way through the first stage, you find yourself fighting some regular thugs outside a building when this monster among men *bursts through the wall*, absolutely terrifying you in the best way possible.

30 YEARS OF DIZZY

As the most popular character on the 8-bit home computers and a smash hit on 16-bit systems, Dizzy seemed to crack the gaming market with frequent number ones and millions of copies sold. David Crookes looks back at his eggs-cellent adventures



» [Amstrad CPC] How it all began… the opening screen of the very first *Dizzy* games. Look at all of those lovely lives.

It was a brutally hot Saturday on 8 April this year in Nottingham, the sun glistening off the trams that run down its streets and reflecting off the sunglasses of people laughing as they clinked glasses on the outdoor terraces of numerous bars. Not a day, perhaps, to be indoors playing and discussing games. Yet, inside the National Videogame Arcade, dozens of people were doing just that, basking in the alternative warmth of a myriad screens.

This was the setting of the very first International Dizzy Day, a celebration of a gaming series that made its debut 30 years ago in June 1987. The venue was hosting two talks by the series' creators Philip and Andrew Oliver and it was unveiling a new *Dizzy* exhibition in a small room packed with hand-drawn paper maps, design documents and photographs.

Slung across the window was a pair of curtains which once hung in the bedroom of the Olivers' parents' house as they developed *Dizzy* for Codemasters during their teenage years. Letting in but a glimmer of light, they effectively shut the room away from the outside



THE YOLKFOLK

Here are all of the Olivers' eggs in one basket



DIZZY

■ This tireless adventurer lived in a treehouse in the Enchanted Forest near the city of Keldor, but his life was frequently turned upside down by Zaks, forcing him to bounce around desert islands, fantasy worlds and castles, collecting items and solving puzzles.

DORA

■ Having suffered the indignity of being turned into a frog in her debut game, *Magicland Dizzy*, Dizzy's sister ended up getting stuck in a dark place in the next game. She wanted to own a sweet shop and seemed to enjoy making cakes, too.

GRAND DIZZY

■ Despite looking old (cue ageing moustache) and frail (walking stick), Grand Dizzy could actually somersault, (there's hope for us all). He was also very wise (it was the glasses, you see) although he got himself trapped in a magic mirror in *Magicland Dizzy*.

DOZY

■ Dozy slept away most of his life but he was a good egg. Even when Dizzy accidentally booted him into the water in the third game, he bore no grudges, handing his brother a comfy pillow in the fifth.

DENZIL

■ Denzil was the cool dude of the Yolkfolk, distinguished by his shades and pumping music through his personal stereo. He was also rather rude, turning up the volume and ignoring Dizzy once the initial conversation was done and dusted.

DAISY

■ Prone to being kidnapped by Zaks and keen to see the good in everyone, Dizzy's girlfriend made her debut in *Fantasy World Dizzy*. Players saw another side to her when Dizzy picked up a whip from her bedroom in *Crystal Kingdom Dizzy*, though!

DYLAN

■ A chilled-out, spaced-out hippy, Dylan was so at one with nature that he had actually become a talking bush in *Magicland Dizzy*. He was able to dish out some of his laid back vibes in the sequel, *Spellbound*, though.

world. But for the gamers who had come to pay homage to *Dizzy*, that was perfect since it allowed them to concentrate on the fantasy lands being played out on the screens instead.

For those who don't know, *Dizzy* was a game about collecting items and solving puzzles, usually to defeat the evil wizard Zaks. It was as much a challenge of the mind as it was of dexterity; a near-perfect cartoon world of adventure, one that was eventually supplemented by a colourful cast of characters and ever-larger environments. The game sold in droves and sparked a fair few spinoffs. Yet *Dizzy* almost never came to be.

The story began in 1985 when the Olivers developed *Super Robin Hood* for Codemasters. The game had enabled them to work on a method of mapping screens and a solid control system and it gave them ample experience of producing a side-on adventure game that made use of keys to activate moving platforms which opened access to new areas.



In following it up with *Ghost Hunters*, they were able to stick to a similar formula but swapped out a medieval castle for a haunted house. They introduced more pick-up items and played around with techniques from shooting to co-op play. It was through such tinkering that a new character was born. "Philip created *Dizzy* when we were developing *Ghost Hunters* as an experiment of just trying to get a big face on a character," says Andrew, of his brother's attempts to lend facial expressions to the game's hero, Hunk Studbuckle. "The character definitely came before the game."

That game was set to be called *Magic Kingdom* and it was – in the minds of the Olivers – an evolution of their previous two titles. It introduced a fantasy village called Katmandu and it took the action outdoors, with the objective to make a deadly, magic potion to kill Zaks. "We came up with a Leprechaun's Wig, a Cloud's Silver Lining, a Vampire Dux Feather, and a Troll Brew," recalls Philip. "We'd had the J. Milton Hayes' poem *The Green Eye of the Yellow* set as English O Level course work and thought it evoked the mysterious land far away. We didn't realise that Katmandu was a real place."

The Olivers had a checklist of sorts. The game had to appeal to children, so no shooting or obvious violence.



» [Amiga] The later Atari ST and Amiga ports of various *Dizzy* games did a much better job of capturing the cartoon styles the twins had originally envisioned.

The screens also had to form a large, interesting map and there were to be no continuous deaths and resets – just a couple of ways to die per screen ("not as many compared with other platform games," says Philip). Crucially, they didn't want lots of pixel-perfect jumps. "There was a real hardcore mentality of making all jumps pixel-perfect back then," explains Philip. "You only needed to look at classics like *Manic Miner* and *Jet Set Willy* to see this." Instead, *Dizzy* would literally be on a roll. "We decided he'd roll until he was back on his feet and, while it made him a little harder to control, it looked good. It also added extra peril," Andrew says.

The Olivers began to draw influence from other games, such as *Castle Quest* on the BBC Micro, *Frak* and numerous text adventures. "We really ▶





» The Oliver twins taking a break from coding to promote *Dizzy* at CES.

FAILURE TO LAUNCH

The Dizzy game that was scrambled

Philip and Andrew Oliver's statement regarding their Kickstarter *Dizzy* project back in December 2012 was written with a heavy heart: "*Dizzy Returns* in all likelihood won't meet its funding target." They weren't joking. With eight days still to go, the game – set to be the first *Dizzy* adventure since *Crystal Kingdom Dizzy*'s release 20 years earlier – had raised just a smidgen over £23,000. The Olivers, meanwhile, had asked for more than ten times that amount, £350,000.

For fans of the series hoping for another trip to the Kingdom of Zakeria, it was a real blow. The idea had been to bring the game up-to-date with fully-animated 3D styling, a new story and fresh game mechanics. There was even going to be an 8-bit retro mode to please stalwart fans. Today, in all likelihood, such dreams will never come to fruition. Politics are also playing a part.

"*Dizzy* is stuck awkwardly between us and Codemasters," says Andrew. "We'd like to bring it back but Codemasters don't really see it as something they want to do. Equally, it won't release it back to its creators because of its book value." Instead, fans have consoled themselves with the free online releases of the previously canned titles *Wonderland Dizzy*, *Dreamworld Pogie* and *Mystery World Dizzy* (find them at wonderlanddizzy.com, dreamworldpogie.com and mysteryworlddizzy.com respectively). The titles have also been placed on carts and sold on Kickstarter.

"We came to an amicable agreement with Codemasters which allowed us to release these games if we give the royalties to charity," says Andrew, citing Special Effect and the National Videogame Arcade in Nottingham as the special causes. The agreement will continue to a brand new Dizzy game that was recently announced for the Spectrum Next. See page 8 for more details.

> "We were building stories and we wanted more excuse for dialogue"
> Phillip Oliver

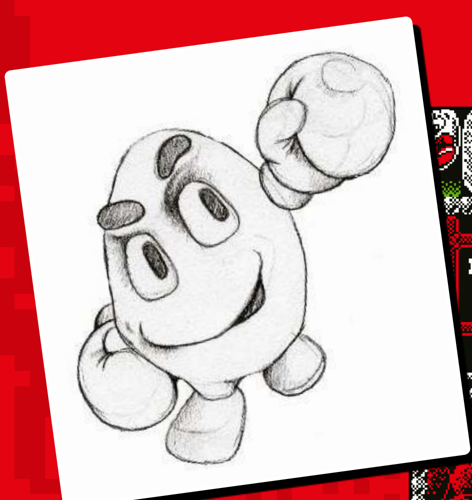
▶ liked games where the screens created full maps and where players went back and forth, exploring," Philip says. They decided to let players make use of a inventory, so objects could be collected and taken to the place they needed to be used. This, they say, was an evolution of *Super Robin Hood* and *Ghost Hunters*. "In *Robin Hood*, we used keys, but all they were identical and there were no clues as to which key would turn on which platform. In *Ghost Hunters* we used objects, but there was no logic as to what object opened a new route. So in the new game we wanted players to see an obstruction and then search for what item would clear it. It needed to make sense," says Andrew.

Development took six weeks, and when the Olivers showed it to Codemasters, the company didn't think much of it. Boss David Darling was convinced it would bomb. But he gave it the nod based on the Olivers' past successes. A decision was also made to rename the game *Dizzy – The Ultimate Cartoon Adventure*. "A last-minute change," says Philip.

At first, sales were slow, but the game reviewed well. It also seemed to win itself a strong following. "We were triggered to write *Treasure Island Dizzy* due to the volume of fan mail the first game received," confirms Philip. They gave themselves two months to write the game and, using the same flick-screen system, had Dizzy needing to escape from a desert island while collecting 30 pieces of treasure as a sidequest.

"We also added a three-item inventory system although it was still based on just one action key," says Philip. The game introduced the iconic treehouse areas, added location names to every screen and allowed two non-player characters to make an appearance. An underwater section was also added and could be enjoyed as long as Dizzy had a snorkel. "The underwater section was great fun but unfortunately it was fatally flawed and we didn't realise until we'd nearly finished the game," says Philip, wincing.

"The problem was if you died underwater, from, say, taking on the aqualung you'd drown, but which coast would he be reset to? We have to think about whether we gave him back anything that's been put down underwater and we got a bit stuck. We realised the same problem could occur elsewhere in the game and that, after dying, it may not be possible to complete the game. It was too late for a redesign and so we gave him just one life. We felt bad about this."



» A sketch of Dizzy, highlighting his unmistakable boxing glove hands. How on earth did he pick things up?



» [Amstrad CPC] The twins would often look to classic tales for inspiration. We're pretty sure Dizzy isn't the true king of England, mind.



CODEMASTER'S DIZZY IN KIDNAP TORTURE RIDDLE

by our beastly correspondent

This month's ridiculous promotional photo comes, not surprisingly, from Code Masters. Here we see the Oliver Twins with their cuddly friend, the monstrous Dizzy.

Code Masters also sent us a press release bemoaning the fate of **Dizzy**, saying that a certain nasty (unnamed) computer magazine had horribly tortured and mutilated him. How ghastly! we all cried. Boo, hiss, foul play!

Of course, whilst we're terribly sorry that **Dizzy** isn't feeling very well at the moment, we would like to point out to Code Masters that we'll untie the little beggar when they stop sending us ridiculous promotional pictures. OK?

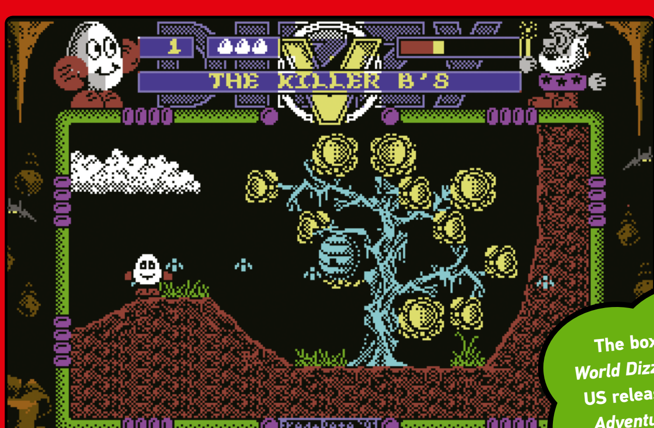
» The Olivers had no problem promoting Dizzy. Calling the iconic character monstrous is pushing it a bit far, though. He's adorable.

The game made reference to the magazine *Sinclair User*. It was reported that the Olivers had taken a toy Dizzy to the offices of publisher EMAP but the journalists had knocked the stuffing out of him. Cue the ability to pick up a copy of *Sinclair Abuser*. "It was a little in-joke," Andrew laughs. "It was not meant to be a slight on *Sinclair User* although some people thought it was. Actually we liked the guys at *Sinclair User* and Tony Dillon gave *Dizzy* a 9/10 review."

Treasure Island Dizzy sold as many as 300,000 copies, shooting to number one and causing sales of the debut game to rise, too. Codemasters then commissioned a third game: *Fantasy World Dizzy*. This introduced a neater menu system, lots of text and the Yolkfolk. "We were building stories and we wanted more excuse for dialogue," says Philip, of the new bunch of characters. "If you could meet obviously friendly folk and obvious villains, the story could be ▶



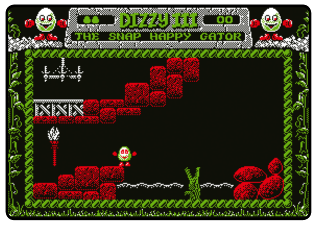
» [C64] Most of the *Dizzy* ports for Commodore's console were disappointing. Although some had great music.



The box art for *Fantasy World Dizzy* was used for the US release of *The Fantastic Adventures Of Dizzy* even though they were two different games.

CONVERSION CAPERS

The many conversions of Fantasy World Dizzy



AMSTRAD CPC

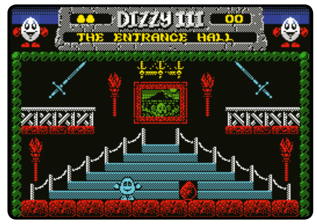
1989

■ While the first *Dizzy* games were written using Amstrad CPCs, by the time they came to develop *Fantasy World Dizzy*, the Olivers were developing on 8086 PCs. Not that it made any difference to the player: this third adventure game used the same Mode 1, four-colour graphics of the first two.

ZX SPECTRUM

1989

■ Neil Adamson's loading screen, the Olivers' design, and David Whittaker's music ported perfectly to the Speccy, but the beanstalks up the side of the screen were removed. The Olivers were only involved in coding the Speccy and CPC versions: they moved to the CD Games Pack for both machines straight after.





COMMODORE 64

1990

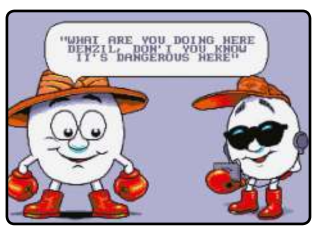
■ Ian Grey coded the C64 version and it added a new loading screen and a colourful backdrop image while replacing *Dizzy III* at the top to '*Dizzy 3*'. The game watered down a nice quirk: rather than four attempts to boot Dozy into the sea, it took just one. He also bobbed in the water rather than sail away.

AMIGA

1991

■ This colourful, well-animated version of the game was programmed by Andrew Green, with the graphics and screens produced by Terry Lloyd and the wonderful music by Allister Brimble. A scoring system (plus a high score counter) was added, but the scrolling was rather jerky, though.





ATARI ST

1991

■ The same team who manned the Amiga version, developed the game for the Atari ST, so it was identical in nature. Both versions upped the ante with the Yolkfolk conversations (the Yolkfolk having been introduced in *Fantasy World Dizzy*). They were given full cutscene screens on which they chatted away.

DOS

1991

■ Again, Andrew, Terry and Allister joined forces, this time to work on the DOS version – the first outing for Dizzy on the PC. A version of the PC game was released into the public domain, and an 0898 number was needed to unlock the game after five minutes of play – the experience wasn't too successful.

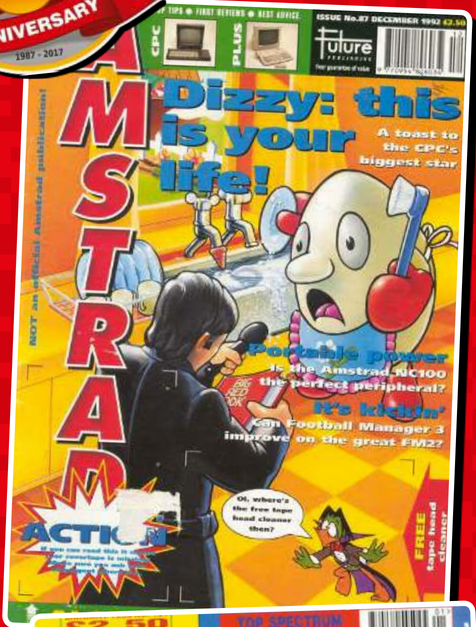




NES

2017

■ *Fantasy World Dizzy* was never released on consoles but a slicker, updated version closely related to it nearly was. *Mystery World Dizzy* was developed for the NES in April 1993 but it was canned. It finally got an airing in April this year thanks to the talents of *Dizzy* fan Lukasz Kur.







» Dizzy appeared on the cover of many magazines, confirming his status as one of the key mascots of the era.

▶ told more easily and new types of puzzles could be created."

In this game, Dizzy could communicate with Dozy, Dylan, Grand Dizzy et al, and it made the gaming world feel alive. The problem of one life in *Treasure Island Dizzy* was fixed, with players given three. The game was also peppered with popular culture references and fairy tales that ranged from *Jack And The Beanstalk* to *Mr Ben* and *Yellow Submarine*. As a result, the game oozed confidence and ambition – some of the game was even upside down.

It was also sufficiently tricky to get kids talking in the playground, encouraging more sales. Those who found it especially difficult to defeat Zaks while avoiding dragons and figuring how to get past the armarog, made costly phone calls to Codemasters' premium-rate 0898 helpline – the first time the company had offered recorded solutions to stuck gamers. The scripts were written by the twins and recorded by their sister, and Codemasters added the number to the packaging. "Months later, David told us how much money had been generated – it was as much as the royalties for the game itself," says Philip. "Codemasters then added phone numbers for its other games."



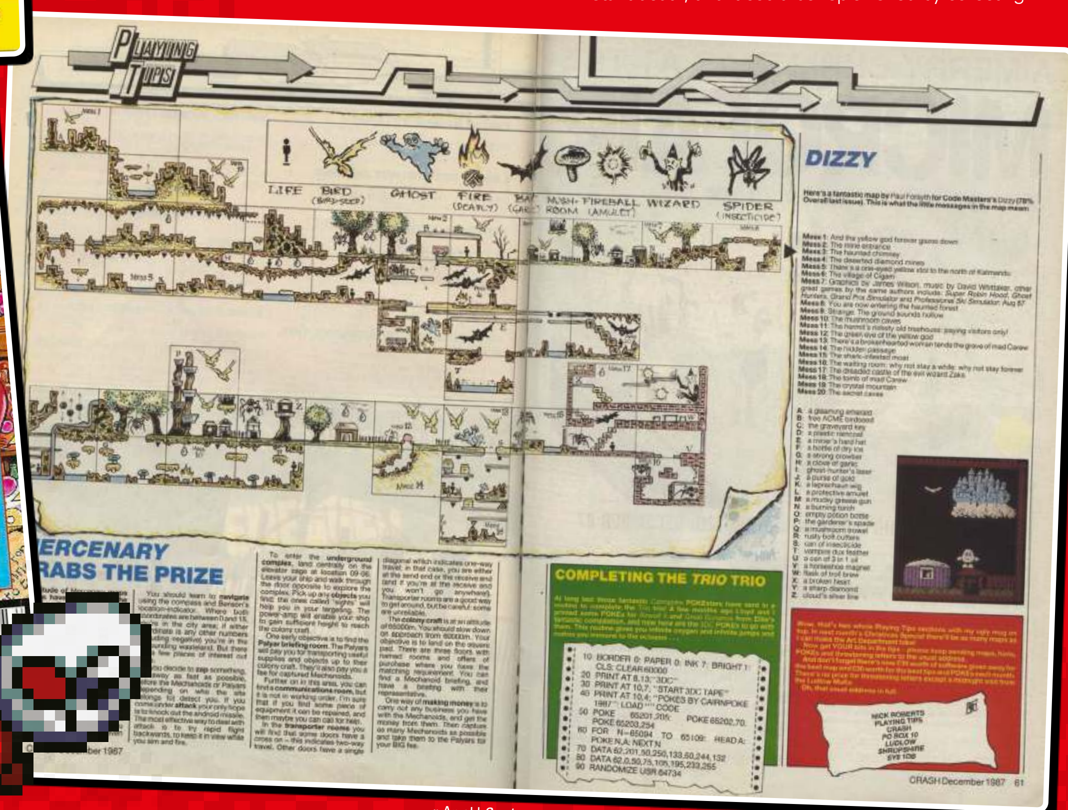
» [NES] *Wonderland Dizzy* was inspired by *Alice In Wonderland*. It was released in 2015 after the twins discovered a prototype in their loft.

> **"In those days we were coding in machine code and the concept of an engine was embryonic"**
> Paul Ranson

***Fantasy World Dizzy* sold 600,000 copies, making a fourth game inevitable.** Called *Magicland Dizzy*, it was designed by Philip but its development was overseen by a company called Big Red Software. Meanwhile, Andrew was hard at work creating another game called *Fantastic Dizzy* on the NES, since Codemasters felt it was time to move the game on to consoles. To do this, the Olivers formed their own company, Dizzy Enterprises. It underlined how important the character had become, yet Codemasters' early experiments with the full-price market almost derailed the series.

"*Magicland Dizzy* was sold as part of a compilation called *The Dizzy Collection* which included the first three adventures and *Fast Food* for £9.99" says Andrew. "Codemasters had a problem moving to full-price games but it knew selling titles at this price required game development advances and huge marketing spends which it couldn't afford so compilations were a solution – larger boxes with some old games and some new. But because most *Dizzy* fans already owned four of the games, they weren't happy at spending money on titles they already had." Pressure mounted fast for *Magicland Dizzy* to be released on its own.

The fourth game in the series had a three-slot inventory system and a plot that involved rescuing the Yolkfolk after they had become imprisoned by Zaks. There was an energy bar, which got around the issue of instant death, and it could be replenished by collecting



» An old *Crash* map of the original *Dizzy* game. Later games would become far more ambitious in their size.



THE DIZZY SUPERFAN

We chat to yolkfolk.com's Andrew Joseph



Andrew Joseph runs the *Dizzy* fansite yolkfolk.com. As well as containing details of all of the *Dizzy* games to date, it hosts the three recently-found console titles which can be played for free online. There is also a huge selection of fan-made games and remakes. We caught up with him.

When did you first start playing *Dizzy*?
The first game I remember playing was *Kwik Snax* when I must have been about six or seven years old. I loved the process of moving the blocks and the graphics were so colourful. I'd recognised the Codemasters logo on the box and I knew it would be a great game.

How important a character was Dizzy?
Dizzy was a mascot to British gaming in the 8-bit era. For the six-year-old me, who waited five minutes for a cassette to load, *Dizzy* quickly became a character who you wanted to play. You wanted to be the hero. A fantasy world meant there were no real-world dangers and you felt like you were playing with the character and sympathised with him.

Why do you think the games declined in popularity?
As an outsider at the time, I believe Codemasters just moved on and the Keldor Forest became a distant memory very quickly. But Dizzy and the Yolkfolk and all the characters you met in the games, were so memorable that each one could have had their own game and merchandise.

So how did you first become involved with yolkfolk.com?
In 1998, Peter Teal started a fan site for *Dizzy* dedicated to compiling as much information as possible about the character and the games. Around the same time I, too, thought about setting up a site dedicated to many fan games that were scattered about the internet as well as promote my own. This turned into the Dizzy Remix Zone. Around the end of 1999 I joined the team of yolkfolk.com and, when Peter had other commitments and left the team, I took over around 2001. It has been evolving and changing ever since. Peter later rejoined along with Adam Markey and we're now a three-man team.

What have you learned during that time?
I have learned that a game doesn't need to have great graphics to have great gameplay and that the lack of 'realism' helped immerse the player and allowed them to be actively invested in the game they were playing in.

How passionate is the *Dizzy* community?
It is ever-growing and, on social media, it is 'eggs-panding' daily. Dizzy himself also has a Facebook page which I believe Philip Oliver is the editor of.

diamonds. Big Red founder Paul Ranson was proud to take the series on. "There was a sense that it was a gift," he says, "and it elevated my business and career."

Philip had committed the design to a wad of A4 paper which included the map and the puzzles. Big Red's first task was therefore to get to grips with the source code and turn the game around in a respectable time. "You have to remember that in those days we were coding in machine code and the concept of an engine was embryonic," says Paul. "Andrew's code was good though and [coder] Fred Williams resisted the urge to attempt to reprogram the thing from scratch."

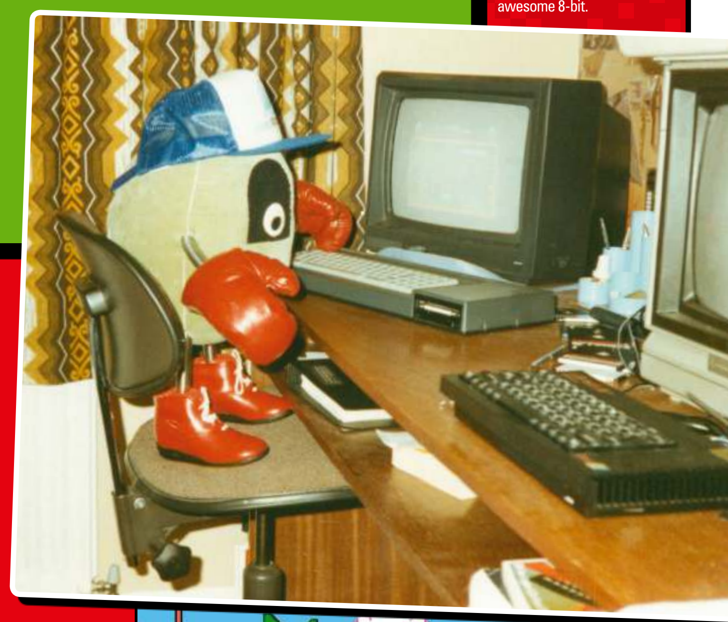
Yet there was still a sense that Codemasters wasn't entirely convinced. Philip says it "felt funny" producing a kids' game and that David Darling thought it was 'uncool' ("he wanted to go after the car racing market or sports like football"). The Olivers pushed for merchandise and worked directly with sales and marketing to make it happen. But while there was talk of Hanna-Barbera getting in touch about producing a television cartoon series, "We only heard months afterwards and we have no details of how serious they were or who contacted who," Philip laments.

There was cash for some promotion, though. Codemasters had struck a deal with Camerica to distribute its games in North America two years earlier and the pair had a stand at the CES in Las Vegas in January 1992 to market the Game Genie, *Micro Machines* and *Fantastic Dizzy*. Camerica commissioned a huge Dizzy costume and the twins, together with a few others, took it in turns to wear it around the event floor. "Luckily, they had a QA guy called Graham Rigby who seemed to do most of the walking around – it was so hot and sweaty inside. We couldn't bear to do more than 30 minutes each!"

Yet they felt it was worth it. "*Fantastic Dizzy* on the NES was a massive turning point for us," says Philip. "Up to this point, all *Dizzy* games had sold for £2 or £3 pounds and been written in around six weeks, in 32k memory and with potential sales of around 100,000 to 200,000 copies. With the NES, we had 256k of memory, the game would sell for £30 and Nintendo titles were selling in their millions." The twins gave themselves eight months to produce *Fantastic Dizzy*, "The biggest and best *Dizzy* game ever," Philip gushes.

Fantastic Dizzy introduced minigames to the series as the Olivers looked to build on a winning formula. "We had a lot of potential to make a really fantastic game, so not only did we make a very big adventure combining most of the puzzles from all previous games into this one game, we wanted to include some arcade action." The game was delayed by a year but it was critically acclaimed. A Mega Drive version was also created, bringing scrolling, 250 collectible stars and even day-and-night cycles. The graphic capabilities of the 16-bit console made for a sterling release.

Back on the home computers, *Magicland* was performing well, showing the series was in capable ▶



» Note how Dizzy clearly favours an Amstrad while coding. This is hardling surprising as the Amstrad is an awesome 8-bit.



» [NES] A recent Kickstarter saw physical editions of *Dreamworld Pogie* being made for the NES.





» [Mega Drive] *Fantastic Dizzy* on the Mega Drive was one of the finest *Dizzy* games and it introduced some lovely affects such as rain, night and day.



» [Amiga] The lovable Pogie would eventually appear in his own spinoff game, although it wouldn't get a physical release until 2017.

LET'S PLAY ГОЛОВА КРУЖИТСЯ

Russia's love for Dizzy has resulted in a superb Spectrum release

As well as the official series of games and spinoffs, fans of the bouncing egg have created their own titles, many of which have been developed using a specialised game engine released in 2006 called *DizzyAGE*. Around 400 *Dizzy* adventures and arcade games are said to have been produced to date and you can visit yolkfolk.com/games/fan to download and play them.

But where should you start? One title in particular, which has been getting a lot of attention of late, will certainly be worth a try. It's a Spectrum version of *Crystal Kingdom Dizzy* made by a group of Russians including coder Evgeniy Barskiv and artist Dmitri Ponomarjov and it was released this year. "Looking at it, I'd say it is one of the most accomplished Spectrum games ever made," says Philip Oliver. It's available at yolkfolk.com/games/crystal-kingdom-2017-remake.

That it has been made in Russia is no surprise. Oleksandr Kovalenko, who runs a computer museum in Ukraine, says clones of the Spectrum were very popular in former USSR countries and that *Dizzy* was a popular character. "All released versions of *Dizzy* were available in our countries," he says. "The cassettes were sold on local radio markets and many sellers just copied cassettes using home tape recorders. Later some unofficial, translated versions became available, too."



hands. It referenced a host of works from *The Frog Prince* to the *Wizard of Oz* and *Pac-Man*, adding to the fun. Big Red was asked to continue the franchise and it completed *Spellbound Dizzy* in 1991.

S*pellbound Dizzy* was spread over a mammoth 100 screens, making it the largest of all the games. Dizzy could swim and he became hurt if he fell too far but players could collect apples to heal him. There were lots of fun, animated sections, too, as Big Red unleashed its creative juices. "It used the same basic tech as Andrew had written but Fred Williams gave it some mega tweaks to enable us to have so many rooms," says Paul. "There was a new mechanism of Dizzy moving in the pipe sequences which were nicked (or inspired, if you like) from *Mario*. I remember my brother, Peter, working hard on the swimming animations. The whole thing had to fit in a 48K version as well as a 128K version something that was rarely done. Coupled with a development schedule that would be considered impossible by today's standards – it was an effort, to say the least."



» The Olivers attempted to reboot Dizzy on PlayStation 2, but the game never went anywhere.

> "There was a new mechanism of Dizzy moving in the pipe sequences which were nicked from Mario"
>
> Paul Ranson

A cut-down 'lite' version appeared on the Commodore 64 as part of the compilation *Dizzy's Excellent Adventures*. "I was development director at Codies and the chap who had been commissioned to make this version was over ambitious in thinking he could remake the engine and code the game in the time available," Paul explains. "As a consequence, we had to recode a really weak and reduced version of the game at the last minute." *Spellbound*'s reviews were lukewarm. "The character is dated, the concept of the game is even older, and the look and feel are older still," bemoaned *Amiga Power* reviewer Les Ellis.

Still, it didn't put off Big Red. *Dizzy Prince Of The Yolkfolk* was *Dizzy 6* and it was released on the *Dizzy's Excellent Adventures* compilation. While it was much smaller with just 30 screens (and became *Dizzy The Adventurer* in America when it was tweaked and made to work with the Aladdin Deck Enhancer), it was less convoluted and required straightforward lateral thinking – things which went down well with the critics.

Paul recalls how it got lots of positive feedback, with players enjoying the fact it could be played without as much walking around. It was a major contrast to *Spellbound* and deemed perfect for a remake on iOS and Android in 2011. "It was like a reboot of the early Nineties for me and I loved it," says Paul who worked on the remake which eschewed the original's three lives and made landing after a jump a little less problematic.

There was, however, time for another foray. *Crystal Kingdom Dizzy* became the last of the original releases

SPINNING OFF

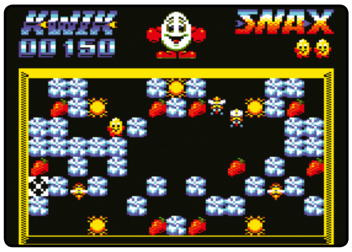
Sick of platformers but want more Dizzy? You should try these…



FAST FOOD

DOS, 1987

■ The Olivers planned to call this 30-screen maze game *Happy Eater* and they wanted the main character to be the mascot of the roadside restaurant chain of the same name. Instead, Dizzy was inserted, and the game, written over a weekend, had players gathering food and power-ups while avoiding monsters.



KWIK SNAX

AMSTRAD CPC, 1989

■ This addictive *Pengo*-style puzzle sequel to *Fast Food* made a good attempt at integrating Dizzy and the Yolkfolk. It placed Denzil, Dylan, Grand Dizzy and Daisy in distinct worlds and had Dizzy pushing block walls along, crushing his enemies and picking up fruit in order to rescue his trapped friends.



PANIC DIZZY

AMIGA, 1990

■ Spread over 20 levels, *Panic Dizzy* charged players with guiding a conveyor belt so that its holes would match up with the different shapes that fell from the pipes at the top of the screen. It sounds pretty basic, however fast reactions and a calm head were needed as the pipes moved down bit by bit.



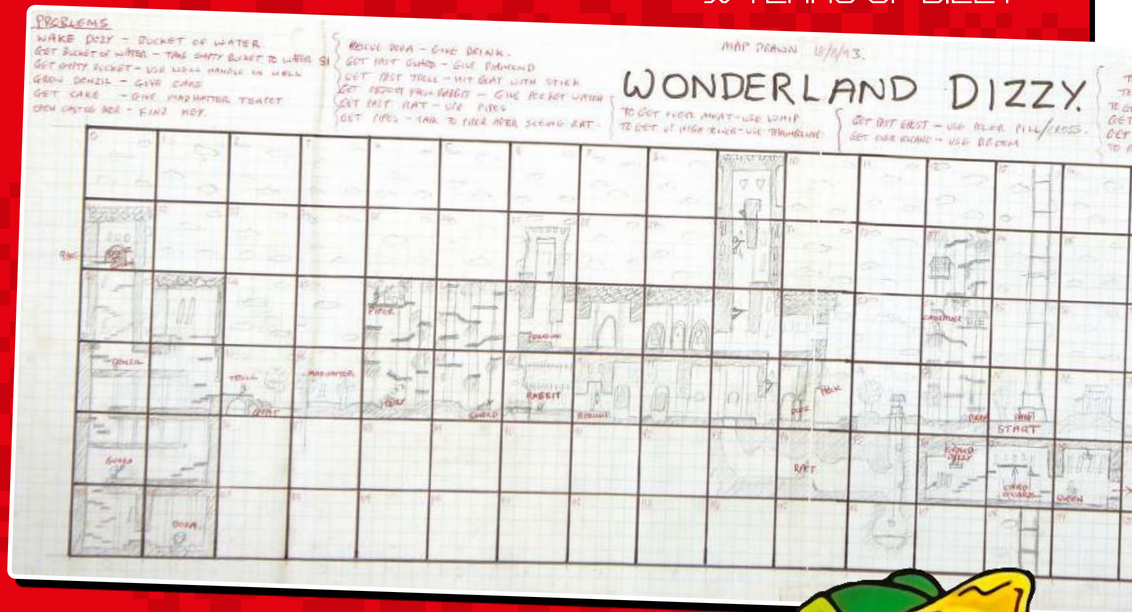
BUBBLE DIZZY

AMSTRAD CPC, 1990

■ Noticeably inspired by *Underwurlde*, *Bubble Dizzy* needed players to jump from one rising bubble to the next in order to work themselves up the screen. Linger too long and the randomly emerging bubbles burst, making the eight levels rather challenging. It was spun from a minigame in *Fantastic Dizzy*.



» [iOS] A remake of *Dizzy: Prince Of The Yolk Folk* was released on iOS in 2011, 20 years after the original game was first released.



» A look at the design that went into *Wonderland Dizzy*. It's far larger than the original *Dizzy*.



and it was not only coded by Visual Impact but released at full price which meant as much as £19.99 on the 16-bits. It felt like a different game in many respects, benefitting from having passwords to allow access to the four different worlds rather than one. The plot revolved around the Yolkfolk's treasures having been stolen from the Temple of Zeffar, forcing *Dizzy* to retrieve them and while some of the puzzles were very obvious others felt obscure.

In that sense, there was no change to what have proven to be a winning formula but some earlier decision decisions were overturned, on the CPC especially which saw a switch from the four-colour Mode 1 to the more colourful Mode 0. "Most developers were switching to consoles and programming talent was thin on the ground," explains Paul. "So when I found a team prepared to take on *Crystal Kingdom Dizzy*, I had to bow to pressure that they wanted to make the game in a lower resolution. In retrospect, I think it would have been better to have kept it as it was but I had a Christmas deadline. The C64 version had similar issues and the graphics looked comparatively poor."

While it reached number one, reviews were lacklustre (*Amiga Power* awarded it 36%) and Philip says the sales were low. "That was due to the declining 8-bit home computer market and the concentration on consoles," he explains. The Olivers fell out with Codemasters over some completed, yet unpublished console games including the collect-'em-up platformer, *Dreamworld Pogie*, *Wonderland Dizzy* and the *Fantasy World Dizzy*-inspired *Mystery World Dizzy*. All have since been discovered in Philip's loft and can be played online (see the boxout 'Failure To Launch') but gamers at the time were also getting fed up of trudging around, picking stuff up and solving puzzles. "If your cognitive powers are limited," blasted reviewer Tim Norris, "you'll find the solving of these puzzles quite a rewarding experience."

Crystal Kingdom Dizzy was, alas, the last *Dizzy* game. "To be fair, Codemasters moved on from making cartoon games as a reaction to the failure of selling the Nintendo games," elaborates Paul. "In turn, this was a disaster for Codemaster and the Oliver twins' relationship but the Codies felt that they couldn't take the flying risks that they had done previously." Even so, Codemasters still recognises Dizzy's importance. "We're extremely proud of Dizzy, the leading UK games character in the Eighties and one of the pillars upon which Codemasters grew," says current CEO Frank Sagnier. We still feel we haven't seen the last of the character yet. *





DIZZY DOWN THE RAPIDS

AMSTRAD CPC, 1991

■ Also grown out of a *Fantastic Dizzy* minigame, this *Toobin'* clone had players slowly making their way up a river, avoiding obstacles and throwing a limited supply of apples at any enemies they encountered. There was multiplayer, too: one player as Dizzy, the other as Daisy – the only time another playable character was ever introduced.



GO! DIZZY GO!

NES, 1993

■ Released as part of two compilations – *The Excellent Dizzy Collection* on the Master System and Game Gear, and *Quattro Arcade* on the NES – this one or two-player arcade puzzler was spread over five worlds and its block-pushing collect-'em-up gameplay was uncannily similar to *Kwik Snax*.



CLASSIC MOMENTS

Kirby's Fun Pak

» **PLATFORM:** SNES » **DEVELOPER:** HAL LABORATORY » **RELEASED:** 1996

Being able to inhale enemies and copy their abilities is a pretty neat trick, we'd say. Kirby's signature move is one which serves him well throughout the series, but *Kirby's Fun Pak* added a brand-new spin on it which completely changed the way we played. Once you've gulped down a baddie and nicked its powers, a quick press of the A button sacrifices that ability. Why on Earth would you do that? To create a Helper, of course. These guys look like your enemies, but function as autonomous drones dedicated to aiding Kirby during an adventure. A second player can even join in the fun by taking control of the Helper.

There are lots of situations in which Helpers are useful, but we particularly love dropping them into the fray during boss battles. Why risk your own hide when Poppy Bros Jr is willing to get up in Wispy Woods' face and lob bombs at him? You can sit back and dodge falling apples as your formerly antagonistic buddy does all the work. Marvellous. *



BIO

While Kirby was firmly established with Game Boy and NES platformers by 1996, the pink puffball had only starred in spin-offs on Nintendo's flagship SNES. While *Kirby's Dream Course* and *Kirby's Ghost Trap* were fine games, *Kirby's Fun Pak* was the game that players had dreamed of – not only did it feature a multitude of excellent platform adventures, it also added some neat minigames. The result was a critical and commercial success, selling over a million copies and generally being considered one of the best games in the series, as well as a late treat for SNES owners before the N64 arrived.





MORE CLASSIC KIRBY'S FUN PAK MOMENTS

Gourmet Race



Kirby just loves to eat stuff. King Dedede is quite fond of thwarting Kirby. This natural conflict leads to one of the best games in *Kirby's Fun Pak*, the Gourmet Race. Kirby and his rival race to eat the most food, accompanied by an unforgettable bit of chase music that receives regular play in the **Retro Gamer** office… especially on deadline day.

Megaton Punch



It might just involve timing three button presses well, but there's an undeniable satisfaction to this simple minigame. Perhaps it's the fact that you're punching the ground so hard that it fractures the world. Perhaps it's the fact that in this case, all that force comes from a diminutive pink blob. We just know we like it.

The Big Treasure



There's treasure to be found everywhere in The Great Cave Offensive – the only problem is that it's not always obvious how to access it. After a little bit of lateral thinking, though, you'll often find that it's easier than you thought – and if you get a massive reward at the end of that process, all the better!

Manic Maze



This small puzzle section of The Great Cave Offensive requires you to be quick on the D-pad, as you'll need to hit buttons in the right order and then scramble through the doors that you have activated before they close sut again. It's tricky and will take a few goes, but that makes it all the more memorable.



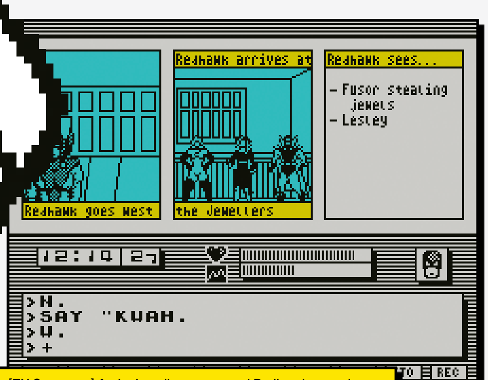
THE MAKING OF

REDHAWK AND KWAH!

WHAM! Melbourne House gave the adventure game a twist with these tales of a superhero. Graeme Mason dons his underpants outside his trousers and brings you the story of mild-mannered Kevin Oliver, AKA... REDHAWK!

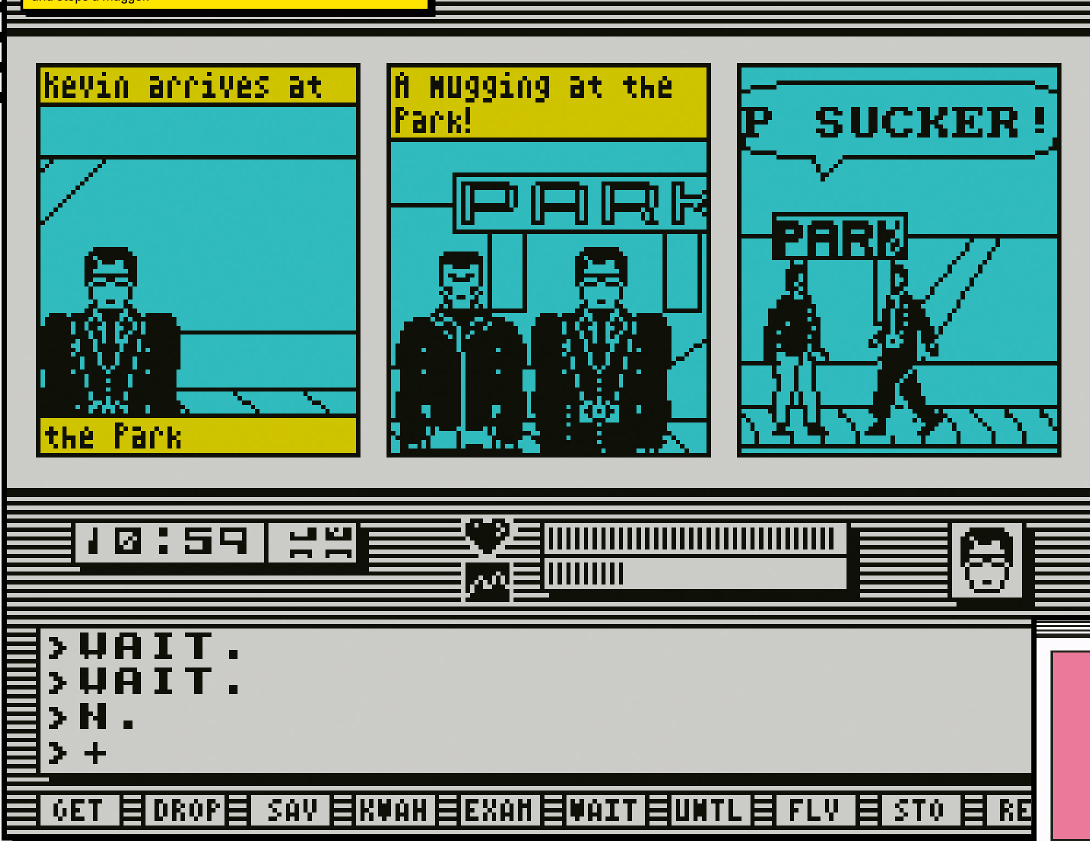


As early as 1986, the graphic adventure genre was beginning to grow stale. Software houses were swamped with submissions from potential authors, and anything new had to offer something substantially diverse in order to stand out from the crowd. A chance meeting at North Stafford Polytechnic would result in one such game. Having been beguiled by computing at school, Mike Lewis abandoned his plans to become a chemist and started a computing degree instead. "We had a teletype terminal linking us to a mainframe in Medway – I got to use it during general studies in sixth form," he smiles. Meanwhile, Simon Price was hooked on videogames from the moment he saw a *Space Invader* arcade machine. "My school put on



» [ZX Spectrum] At the jewellery store, and Redhawk must thwart the first villain, Fusor.

» [ZX Spectrum] Redhawk does the standard superhero thing here and stops a mugger.

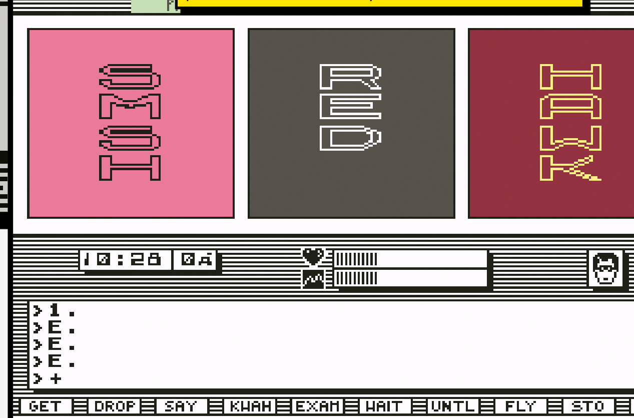




In The Know

- » **PUBLISHER:** Melbourne House
- » **DEVELOPER:** Silhouette Software (Mike Lewis, Simon Price & Carl Cropley)
- » **RELEASED:** 1986
- » **PLATFORM:** ZX Spectrum, Amstrad, Commodore 64
- » **GENRE:** Graphic Adventure

» [C64] In the spirit of Sixties *Batman*, the action in both games is punctuated with comic book-style action words.



"I was hoping to learn how to write my own game so that I could stop feeding Invaders all my 10p coins"

- Simon Price

From Redfox To Redhawk

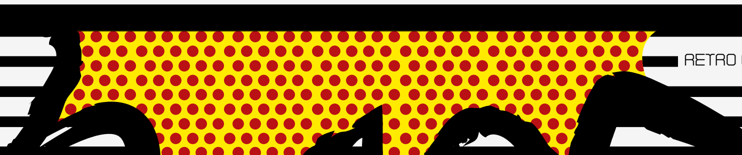
Short, blonde and badass, Redfox bears little resemblance to Redhawk other than her comic book origins and keen sense of humour. Redfox was the brainchild of an artist named Fox (aka Alistair McGilvray), and begun as a wry take on similar barbarian-themed adventures such as *Conan*. The comic debuted in a role-playing fanzine called *Dragonlords*, coproduced by Mike Lewis. "It was originally just a short cartoon strip before Fox decided to publish *Redfox* as a full-length comic," says Mike, "and I started writing the scripts for it from issue three of the fanzine." Independent UK publisher Harrier Comics picked up the strip and Mike initially continued to write the stories before a financial dispute and lack of time – due to his nascent videogames career – ended his involvement. "I didn't work on any more comics for a while, but Carl Cropley and I did work on a proposal called Hampton Black, a story of a Thirties detective in London." Sadly this project was curtailed by the untimely death of Carl in 2012. Only 20 issues of *Redfox* were ever produced, and it was proclaimed winner of the Eagle Award for Best New British Comic in 1986. And it's hard to imagine the heroine wasn't an influence for a somewhat more famous hero, Xena Warrior Princess.

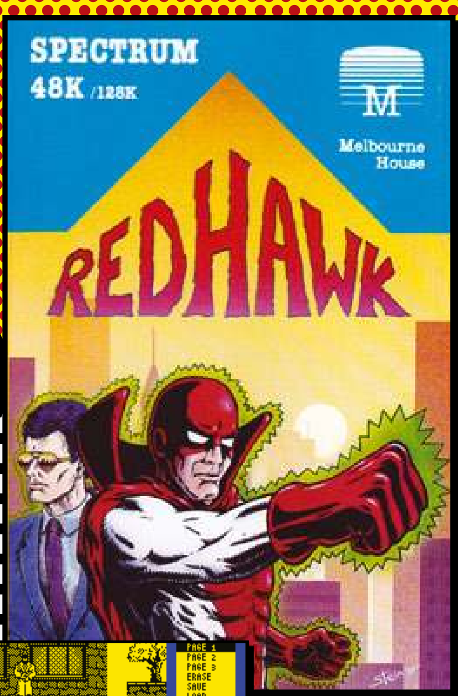
some lunchtime lessons in BASIC programming," he remembers, "which coincided with the arrival of those first *Space Invaders* machines. I was hoping to learn how to write my own game so that I could stop feeding *Invaders* all my 10p coins!" That didn't materialise immediately, but in the process, the two students met. "It was in a student lab – still using teletypes, but at least plugged straight into the mainframe now – and I was trying to write a character generator for a role-playing game," Simon continues. "Mike spotted the manual next to me which sparked a casual conversation, ultimately leading to years of professional collaboration within the games industry." Soon after, Simon would finally create his *Invaders* clone. "I spent a Christmas handwriting code on spare wallpaper roll at home," he jokes. "The environment was saved any further abuse when my long-awaited Sinclair ZX81 computer arrived – I was hooked on computing from that point on."

After leaving college, Simon and Mike planned to find work within the niche of commercial and military programming. "In order to qualify for the Enterprise Allowance Scheme, you had to be unemployed for three months," Mike recalls. "Which left us in the slightly odd situation of signing on in order to start a business of our own." As they couldn't work on their new potential business during this time, the two men began looking for other projects to occupy themselves, and created several games demos. Having already written a book in their final year at college called *Writing Adventure Games On Your CPC 464*, the pair decided to submit one of their demos to the book's publisher – Melbourne House. "They really liked [our demos], but they were on the BBC [Micro], and they said the Spectrum was much more commercial in terms of potential sales numbers," says Mike. The game that had caught the software house's eye in particular was an attractive and unusual superhero adventure.

The idea behind *Redhawk* was to produce a text-driven adventure game, but with a different element, and a twist that would make it stand out," explains Mike. The inspiration came from two sources: A love of adventure games, and a comic that Mike and artist Carl Cropley had been working on. "I worked with Carl on a comic called *Redfox* – I did the scripts. When it came to the game, he seemed the perfect person to do the graphics." Mike was a keen adventurer, too, and even wrote several reviews for Infocom and Level 9 games in magazines such as *TV Gamer*. Conversely, his partner was an unfamiliar with the genre prior to *Redhawk*. "I'd never seen or played an adventure game until I met Mike," admits Simon, "and even then I just adored playing around with them as opposed to playing them properly. My main motivation was fascination with how adventure games worked and how they could be made more sophisticated."

Mike and Simon's diverse taste in comic books is also evident in *Redhawk* and *Kwah!*. "It was deliberately plotted to be reminiscent of *Spiderman*, *Superman* and so on, so that people would be able to get into the character easily," Mike says. "It also allowed you to play two characters in the game instead of the usual single viewpoint, and both characters had different ▶





abilities." Simon's thematic input, as a fan of those famous British comics *The Dandy* and *The Beano*, was to infuse the game with a sense of humour often absent from their more serious American brethren. The stark, yet effective, graphical layout of *Redhawk* was partly informed by Mike and Simon having seen the Apple Lisa in action. "I don't remember how we came up with the design initially," says Mike, "but it was probably in the pub! I do remember sketching the screen layout on a piece of paper and I am sure we drew out a map of the various locations to make sure they made sense." The USP of *Redhawk* would be its combination of three comic-book style panels which depicted the action as influenced by the player's commands in the lower part of the screen. It was an unusual combination, and one that was to appeal to a wider spectrum of gamers. "I think one issue with *Redhawk* was that a lot of people who played hardcore adventure games found it too simple – but people also played it as their first adventure game, so we knew it had broader appeal."

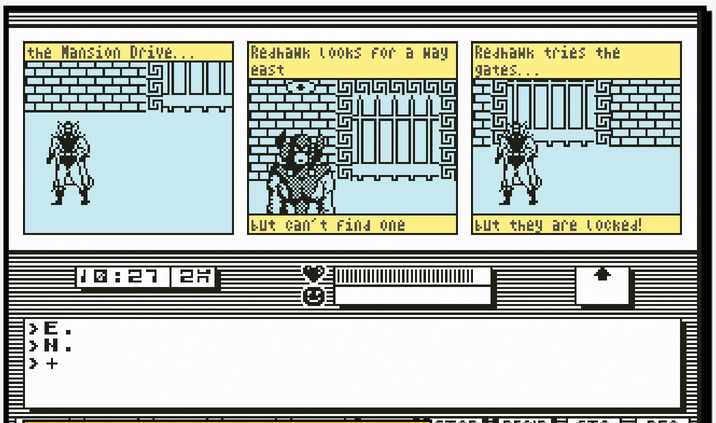
The crimson-suited hero of *Redhawk* is a busy chap. By day, mild-mannered wannabe reporter Kevin Oliver, his first task is to obtain a job at the local newspaper. Once hired, Kevin can snap away at muggers, before

"Kwah! only took about six weeks as we already had most of the code"

Mike Lewis

transforming into Redhawk and dragging the miscreants off to the police station. Once the superhero has achieved his first collar, the law bestows him with a radio which he can use to keep track of crimes. Soon there's bigger threats on the scene than simple muggers: for every superhero needs a supervillain, or in this case four of the dastardly cads. Each villain holds a coloured keycard, the acquisition of which is vital if Redhawk is to defuse the bomb that threatens his city. Fusor, The Rat, Techno and Merlin must all be defeated using cunning and force, before peace can reign once more. Unusually for the era, *Redhawk* worked in real time which stemmed from a discussion on the screen's layout. "Mike thought it would be cool to have a scrolling game clock," reveals Simon, "and once we'd hit on the idea of real time, I was able to draw on concepts from the work I'd done for the military. Time is a tricky thing to handle in an adventure game but getting the right behaviour out of relatively slow machines was exciting."

The game engine was based around one the coders had devised for their Melbourne House book, and was essentially refined and rewritten as development of *Redhawk* proceeded. Duties were shared between the two. "On *Redhawk*, I wrote the Spectrum and Amstrad versions of the code and developed the graphics engine," reveals Mike, "while Simon wrote the Commodore 64 code and worked on the adventure itself." For *Redhawk*'s sequel, *Kwah!*, they worked on the same versions with Mike writing the adventure and Simon the graphics system. "The graphics 'system' was mostly working out how to save memory," notes Simon, "while cramming in as many



» [C64] As in the first game, *Kwah!* begins with Kevin somewhat bemused as to his surroundings.



Developer Highlights

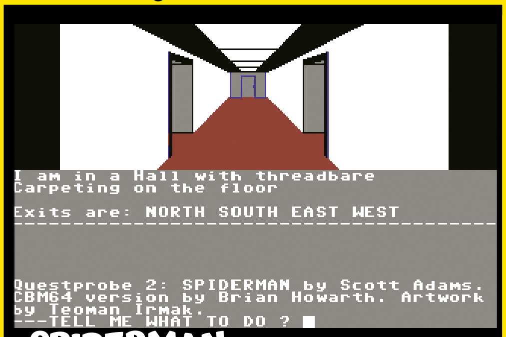
THE MYSTERY OF ARKHAM MANOR (PICTURED)
SYSTEM: ZX Spectrum, Amstrad CPC, Commodore 64
YEAR: 1987

WIZ
SYSTEM: ZX Spectrum, Commodore 64
YEAR: 1987

PULSE WARRIOR
SYSTEM: ZX Spectrum, Commodore 64
YEAR: 1988

8-bit Heroes

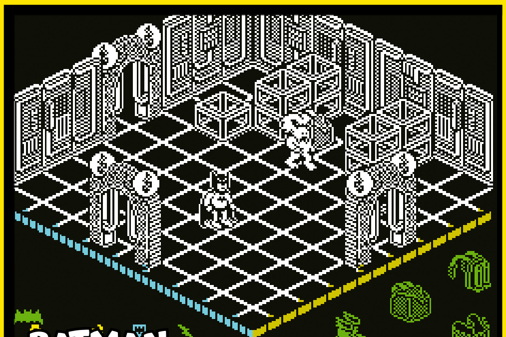
Still got an itch to fight crime? These 8-bit superhero games will sort you out



SPIDERMAN

ADVENTURE INTERNATIONAL, 1984

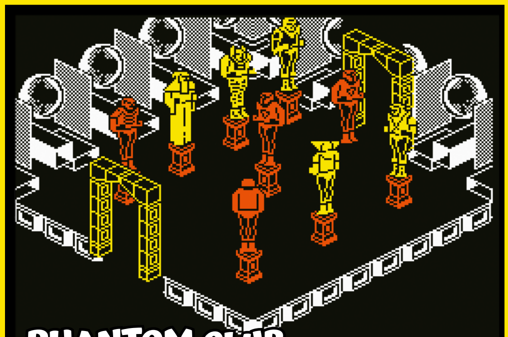
■ Scott Adams's *Questprobe* produced many quality adventures in the early days of the 8-bits and *Spiderman* is another fine example. Taking control of the titular webslinger, the player is soon facing off against dangerous enemies such as Sandman and Mysterio as they once more bid to, of course, take over the world. Mwah ha ha ha!



BATMAN

OCEAN, 1986

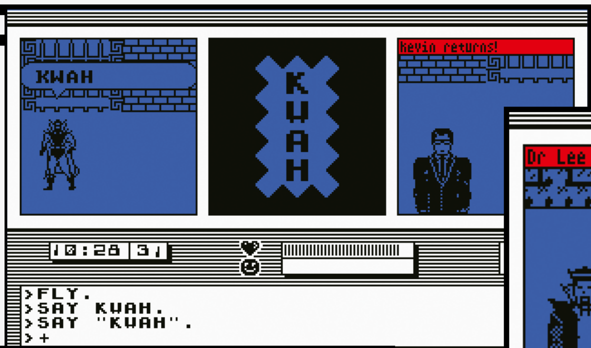
■ Jon Ritman and Bernie Drummond's classic isometric game is inspired more by the camp Sixties TV series than the modern Dark Knight familiar to us today. The caped crusader's task is to locate the missing pieces of his batmobile, and it's no easy task thanks to a range of devious puzzles.



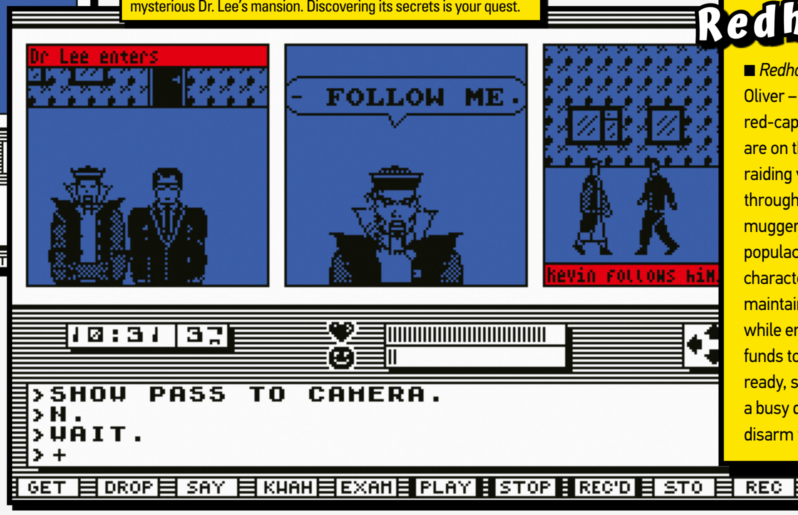
PHANTOM CLUB

OCEAN, 1987

■ Created by the team behind *Movie*, *Phantom Club* cast the player as Plutus, a lowly superhero who is alas the last of his kind thanks to the mind-bending powers of the evil Overlord Zarg. Another isometrically obtuse puzzle game, Plutus needed to negotiate over 550 rooms in order to regain control of his fellow superheroes.



» [Amstrad CPC] Upon uttering the word 'Kwah!', Kevin transforms back and forth into the caped superhero.



» [Amstrad CPC] *Redhawk*'s sequel, *Kwah!*, begins in the grounds the mysterious Dr. Lee's mansion. Discovering its secrets is your quest.

Redhawk 101

■ *Redhawk* is the story of Kevin Oliver – crime photographer and red-caped superhero. Four villains are on the loose and intent on raiding various establishments throughout the city, and common muggers also threaten the populace. Taking control of both characters, it's up to you to maintain Redhawk's popularity while ensuring Kevin has the funds to move about the city. Get ready, superhero: it's going to be a busy day! Oh, and don't forget to disarm that nuclear bomb.

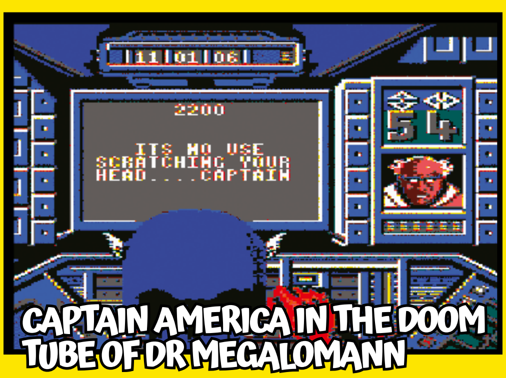
cool fill patterns and hand-drawn images as we could." Space, as ever with 8-bit coding, was the major issue. "It all had to fit into a 48k Spectrum," groans Mike, "and even using tape and printer buffers, there isn't a lot of space." In addition, *Redhawk* and its sequel's authoring tool ran on the BBC Micro. "Mike's Spectrum tape drives kept on failing but we kept master copies of everything on BBC discs," remembers Simon. "But moving data between the machines was a pain. I vaguely remember soldering serial cable plugs to directly connect the machines. And anything involving colours – especially wires – required us to get a third opinion, because both Mike and I are colour-blind!"

Redhawk took the team around five months to create. With the game proving not only a critical, but popular hit, Melbourne House was naturally keen to develop a sequel. "*Kwah!* only took about six weeks as we already had most of the code," explains Mike. "We did change some of the elements, such as the graphics engine, as we went for solid, scaled graphics which made up the various scenes. I think that looks better than the vector graphics of the original." While Simon prefers the line graphics of *Redhawk*, *Kwah*! was a decent seller, although the prospect of a third game was never on the cards, as Mike discloses. "Simon and I were working separately and we'd both started to realise that adventure games weren't really where the money was on 8-bit platforms." Discussions for a second sequel were mooted, but the takeover of Melbourne House by budget superstars Mastertronic ensured a low-key end for the superhero.

Despite the good reviews from the gaming press, Mike and Simon felt *Redhawk* could have been better. One of the few criticisms was the game's limited parser and Mike also admits, "we should've had more locations, to enable *Redhawk* to solve more crimes. But there simply wasn't the space. But as it was our first game, I don't think I would have done anything differently". Simon, however, feels that more could have been made of the humour and interactivity. "In hindsight we should have anticipated that one of the things people would like to do most with *Redhawk* is get him to say funny or rude things. If we'd added some sort of record and replay feature then kids could have used it to enact fun stories, more than one-line jokes."

Post-*Redhawk* games, Mike Lewis created the H.P. Lovecraft-inspired *The Mystery Of Arkham Manor* before moving into 16-bit development. "I wrote a game called *The Acrobat* for Rainbird, which was an enhanced version of the *Redhawk* concept, a point-and-click adventure presented as a comic. But Rainbird were taken over by Microprose, who weren't interested in the game." Exasperated by the continual takeovers and movements within the volatile games industry, Mike began writing hotel software and is today semi-retired. Simon continued development on the Commodore 64 with a number of arcade games but, like Mike, became disenfranchised with the industry and took on a lead programmer role at the University Of Bristol, where he remains today. "Coding with Simon was probably one of the happiest, carefree times I've had in the industry," remembers Mike wistfully. "In those days, two people could write a game in months, you didn't need millions of pounds and huge teams to develop a game with pretty graphics, but lacking the gameplay I feel a lot of Spectrum games had." That's a sentiment we can echo, and the two men remain friends today. "I hugely enjoyed writing these games with Mike," concludes Simon, "and you never know… Redhawk may return one day!" You heard it here first. *

Mike and Simon would like to dedicate this feature to the memory of their friend Kevin Oliver, the namesake of Redhawk's alter ego, who died in 2014 and Carl Cropley, the talented *Redhawk* artist who died in 2012. Both are sorely missed.



CAPTAIN AMERICA IN THE DOOM TUBE OF DR MEGALOMANN

GO!, 1987

■ US Gold's sub-label, Go!, had a varied level of success, and this Captain America adventure, pitting the hero against obscure villain Dr Megalomann, unfortunately leans heavily to the inferior side. Painfully slow gameplay and rough, ill-defined and confusing graphics add up to a poor effort at recreating the first Avenger.



IMPOSSAMOLE

GREMLIN GRAPHICS, 1990

■ An original hero, albeit one that had starred in several adventures already. However, the brave anti-establishment hero of the previous *Monty Mole* games was now transformed into a squat superhero, at the beck and call of an alien who demanded our Talpa europaea destroy five guardians and relieve them of their treasure.



PUYO

Back in the early Nineties, thousands of players were enjoying the competitive thrills of Compile's Puyo Puyo – they just didn't necessarily know it. Nick Thorpe revisits a classic puzzle game with a major identity crisis...



There aren't many spinoff franchises that have completely overshadowed the source material they came from, but it's extremely safe to say that *Puyo Puyo* is one of them. Compile's classic puzzle game series has been going strong since 1991 and even if you haven't played it as *Puyo Puyo*, you might well recognise one of its many Western adaptations. But the Puyos themselves – the multicoloured blobs that serve as the puzzle pieces in the game – actually originated as enemy characters in the Japanese RPG series *Madou Monogatari*, a name that will be unfamiliar to most English-speaking players.

The spinoff puzzle game *Puyo Puyo* is the brainchild of Masamitsu 'Moo' Niitani, the founder of Compile, and has very simple rules: Puyos of various colours fall from the top of the screen. Matching four Puyos of the same colour will cause them to pop and disappear, scoring points and causing any spare Puyos above to



» [MSX2] The pre-arcade *Puyo Puyo* versions emphasised single-player missions, like completing a seven-chain here.

PUYO



» [Arcade] You can use garbage Puyos to your advantage when chaining, as shown with the purple Puyos here.

fall, an occurrence which often causes other Puyos to pop in a chain reaction. When the screen is full, you lose. This sounds easy, but there are two complicating factors. In single-player, the drop speed of your Puyos accelerates over time, until you can no longer keep up. In multiplayer, you have to deal with the presence of Garbage Puyos, which fall onto your playing area whenever your opponent pops regular Puyos. Garbage Puyos will only disappear when regular ones are popped next to them, making them a real nuisance.

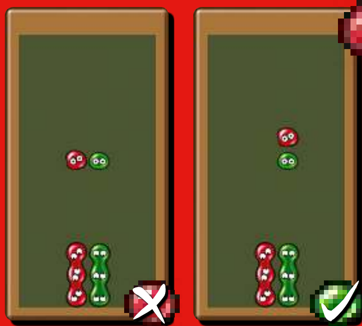
Puyo Puyo had pretty humble beginnings, even for a spinoff. The game was launched for the MSX2 and Famicom Disk System in October 1991, with the latter version appearing as a cover mount on Tokuma Shoten's magazine *Famimaga* rather than as a standalone game. These versions emphasised single-player action, featuring a regular Endless

> "It does a very good job of making all its high-level techniques arise out of its basic mechanics"
>
> Phong Tran

PUYO PUYO

PUYO PERFECTION

Need help bursting your friends' bubbles? Here are five tips to help you play better Puyo Puyo…



1 JOIN THE CHAIN GANG

■ Popping two sets of Puyos in a chain will dump more garbage on your opponent than popping the same two sets together, and the effect is multiplied as the chain lengthens. If you can chain five sets of Puyos together, you should smash your opponent without any problems.



2 GAINING AN EDGE

■ If you build your chains in the centre of the playfield, you run the risk of having a tall third column. If this one is filled, the game is over, regardless of how much free space you have elsewhere. For this reason it's good practice to build to the edges of the playfield, chaining up the walls.



3 BUILD HIGH TO SURVIVE

■ The flatter your chain, the more likely it is that your trigger point is easily buried by incoming garbage. If you know that your opponent is the kind to trigger one enormous chain, you can absorb more garbage by building a very tall chain with the trigger point about half-way up the playfield.



4 WASTE MANAGEMENT

■ It's easy to panic when your playfield is filled with garbage, but you can effectively deal with it by remembering that Puyos will get rid of any adjacent garbage pieces when popped. Maximise the number of garbage pieces your Puyos come into contact with for a better chance of survival.



5 BE A NUISANCE

■ Sometimes, the best form of defence is attack. If it looks like your opponent is preparing to strike, it can be wise to set off a smaller chain in order to send over a wave of garbage. If you can bury their well-planned chain, they'll have to work their way back to it while you're preparing another attack.

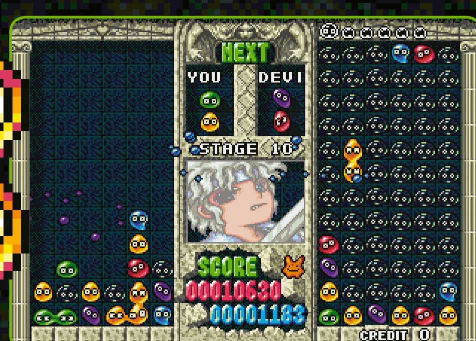


» [Arcade] Newcomers are best advised to start off with the beginner course, which has a unique background and new opponents.

▶ Mode and a Mission Mode which required players to complete certain tasks, such as popping ten Puyos simultaneously or eliminating all red Puyos. In these very early games, the player had six colours to deal with, which made for some pretty complex gameplay.

The major breakthrough for *Puyo Puyo* was the production of an arcade version in 1992, which was made in conjunction with Sega. This game reduced the active Puyo colour count to five, and wisely pushed the compelling two-player mode to the forefront. To justify adding a range of *Madou Monogatari* characters as progressively more challenging CPU opponents, the game adopts a plot that's told in cutscenes between each match. The protagonist Arle has learned a new spell called Owanimo that allows her to battle with Puyos. As usual, she decides to use this to foil the plans of the series' protagonist Satan (or the Dark Prince, over here in the West). This version became popular in Japan and was quickly converted to just about every significant home format of the day.

Despite the clear merits of the gameplay, an official Western release of the arcade game didn't do tremendously well. Efforts to rebrand the series for non-Japanese audiences quickly began. The first (and least well known) of these was *Puzlow Kids*, an official translation of the Game Gear version of *Puyo Puyo* that can only be seen when a Japanese cartridge is played on a non-Japanese console. This relatively faithful version never made it to the West because Sega decided on a much more commercially appealing option – tying the game into the *Sonic* brand. *Dr Robotnik's Mean Bean*



» [Arcade] Successfully popping off a five-chain is a quick way to crush your opponents in this version of *Puyo Puyo*.

PUYO PARTY!

The characters you'll find in Puyo Puyo



Machine replaced the *Madou Monogatari* cast with badniks from the *Adventures Of Sonic The Hedgehog* cartoon series, but changed little else.

Sega wasn't the only company to recognise the value of the *Puyo Puyo* gameplay. Nintendo decided to rebrand the game around its pink puffball Kirby in 1995, creating *Kirby's Ghost Trap* (or *Kirby's Avalanche*, for our American readers). This version replaced the original characters and even background graphics to emphasise the change. Around the same time, Spectrum Holobyte licensed the *Puyo Puyo* concept from Compile to create the Windows and Mac game *Qwirks*, which featured original characters and an endorsement from *Tetris* creator Alexey Pajitnov. Even Disney Interactive got in on the act, licensing the game design to use as 'Bug Drop' in *The Lion King* spinoff *Timon & Pumbaa's Jungle Games*. *Puyo Puyo* was everywhere, without most of the world actually knowing what it was.



» [Famicom Disk System] Special items featured in pre-arcade *Puyo Puyo*, including this enormous Puyo that crushes everything in its path.



» [SNES] *Puyo Puyo's* initial popularity stretched over many years – *Kirby's Ghost Trap* didn't appear until 1995.

Despite the popularity and quality of *Puyo Puyo*, the original isn't a perfect competitive game. There are two major problems with its gameplay. Firstly, a game between two evenly-matched and relatively pacifistic opponents can theoretically go on forever, as there is no mechanic to push the game towards a forced conclusion. Secondly, though you can prevent your opponent triggering a chain with a well-timed one of your own, interaction between the two puzzle combatants ends there – there's nothing you can do about incoming garbage, meaning that a successfully completed five-chain is an instant death blow. These issues were addressed in the first of many sequels, *Puyo Puyo 2*, with the introduction of escalating damage over time and the ability to offset incoming garbage with your own chains. Despite the many *Puyo Puyo* games that have come and gone since, it's the second which still forms the basis of the series' game design today.

> **"My expectation for Puyo Puyo is for it to grow into a classic game like Chess"**
>
> Phong Tran

CONVERSION CAPERS

Versions of Puyo Puyo are almost as numerous as the Puyos themselves, but which one is your ideal fit? We detail them all here…



MSX2, 1991

■ The MSX2 version of *Puyo Puyo* lacks the cutscenes and presentational polish that were introduced with the arcade version, and it doesn't include CPU opponents. It does include the unique Carbuncle and Giant Puyo special items, though.



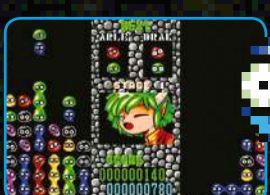
GAME GEAR, 1993

■ This is a good conversion – the Puyos are simplified, but the Mission Mode returns to provide added value for players without a link cable. As a bonus, all the mission objectives and menus are fully translated when you play on a Western console.



PC ENGINE CD, 1994

■ This is a polished conversion, with the CD-ROM format allowing for the addition of lots of voice acting. There are even exclusive scenes for those of you willing to brave the hardest difficulty. The only perplexing point is the odd use of some chip music.



WINDOWS, 1994

■ This is like the PC98 version, but with MIDI music instead of FM synthesis and a lack of playfield backgrounds. It's a pain to get this running on modern hardware due to its use of a long-forgotten encoding method for window and options text.



FAMICOM DISK SYSTEM, 1991

■ It looks more basic than the MSX2 version, but it offers equivalent gameplay. For some reason, you can change the graphics into little people who link arms and stand on each other's shoulders.



GAME GEAR (MEAN BEAN MACHINE), 1993

■ Like the Mega Drive version, music and visuals have been changed and a password system has been added. The mission mode remains, which is a decent reason to own this as a second version.



GAME BOY, 1994

■ This is the only real duffer of the bunch. The Game Boy is limited to two shades representing multiple Puyo colours, and it just doesn't work. It's unplayable without the aid of a Super Game Boy, and even then you'll suffer from clunky control.



SNES (KIRBY'S GHOST TRAP), 1995

■ This major audiovisual makeover plonks the *Puyo Puyo* game system into the Kirby universe. The game is true to the structure of the arcade original, but the graphics and sound have changed completely.



ARCADE, 1992

■ The arcade version is the only place to see all the cutscene conversations in English, even if character names have been changed. It also lowers the CPU difficulty level each time you continue, which is a feature unique to this particular version of the game.



FAMICOM, 1993

■ This is the Famicom Disk System release, tidied up a bit and plonked on a cartridge. There are only slight variations in the title screen and HUD, so there is no particularly compelling reason to choose one of the Famicom versions over the other.



FM TOWNS, 1994

■ Here's another faithful version that looks good, offering a slightly more muted background than the Mega Drive game. The big draw here is the music, which uses different instruments to other versions in order to create a richer sound.



WINDOWS (TIMON & PUMBAA'S JUNGLE GAMES), 1995

■ Chains resolve quickly here, which can throw you off a bit. Being a small part of a compilation package, it doesn't have additional features like extra characters or missions.



MEGA DRIVE, 1992

■ Given that the arcade game ran on a Mega Drive-based board, it should be no surprise that this is a great conversion – it even has the same bugs. The sound does take a hit, though, as many of the arcade game's speech clips are missing.



SUPER FAMICOM, 1993

■ Due to having a lower resolution than the Mega Drive, *Super Puyo Puyo* reduces the dividing wall between playfields and shunts portraits into the background. It does boast higher quality speech clips than the Mega Drive version, and more of them.



SHARP X68000, 1994

■ Sharp's expensive computer is home to a number of accurate arcade conversions, and this is one of them. The visuals, sound and gameplay are basically identical to those of the Japanese arcade game, with no added features to speak of.



MAC (QWIRKS), 1995

■ This official clone by Spectrum Holobyte introduces fairly ugly 3D characters as opponents. It also adds Crystal Qwirks, which have special functions like eliminating all garbage and clearing your central columns.



MEGA DRIVE (MEAN BEAN MACHINE), 1993

■ The music, voices, cutscenes and graphics have been changed to turn *Puyo Puyo* into *Dr Robotnik's Mean Bean Machine*, and level passwords have been added. Thankfully, the gameplay is completely intact.



MASTER SYSTEM (MEAN BEAN MACHINE), 1994

■ It's got all of the Game Gear content, but the graphics haven't been redrawn so you're left with tiny Puyos against an ocean of background. It's passable, but lazy.



PC-98, 1994

■ NEC's computer has an odd set of graphical capabilities – it's good at static images and bad at motion. As a result, everything except the Puyos themselves has been redrawn in high resolution. Other than that, little has changed from the arcade game

AND THE REST…

■ Versions of *Puyo Puyo* have appeared on all manner of compilations and download services, including the likes of *Puyo Puyo Box* (PlayStation) and *Sega Mega Drive Ultimate Collection* (PS3/Xbox 360). They're usually Sega console versions, so *Mean Bean Machine* shows up regularly. Additionally, a number of unofficial clones of varying quality exist, including the likes of *Super Foul Egg* for the Amiga.

Q&A: PHONG TRAN

Better known as S2PID online, this highly-ranked player has provided official tutorials for Sega and is a well-known figure at puyonexus.com



What was your first encounter with the *Puyo* series and what did you make of it?

When I was in middle school, I got my hands on *Puyo Pop* for the Game Boy Advance. I couldn't stop playing it. The puzzle mechanics were just so consuming, and the character banter was funny, snarky and downright savage. I told a *Phantasy Star Online* guildmate and *Puyo* fan about how much fun I had with *Puyo Pop* and asked them to teach me more about the series. Turns out they were secretly a *Puyo* master the entire time! We started playing against each other online on the PC version of *Puyo Puyo Fever*, and I got crushed by their unbelievable 12 chains. If I hadn't been introduced to *Puyo Puyo* with insane high-level play, I don't think I would've been nearly as interested in the game as I am now. Or maybe I've always just been a masochist.

How did you become involved in the Puyo Nexus fan community?

After my *PSO* guildmate got me into *Puyo Puyo*, I started hanging out in the Puyo Nexus IRC channel. For a while, it was just the same small group of about 15 people, but we stuck together and had lots of fun chatting about the lore, training our *Puyo* skills, and cheering on the translation team at Puyo Nexus. The translation team worked on patching and translating the *Puyo* games Sega and Compile hadn't localised, so they played a huge role in keeping our community going.

Around 2010 I think, activity did start dropping off. With Sega's complete silence on anything related to Western *Puyo*, I think you can imagine how even diehard fans would start having trouble justifying their continued support for the series. I thought I had a responsibility to fulfil, as by this point in time I was one of the best players at Puyo Nexus. If there's one thing that could convince Sega to localise another *Puyo* game, it would be an active esports scene. Would that have any chance of developing if I gave up, too? Thankfully, there were still some folks at Puyo Nexus who were just as crazy as me: a_butt, john, Hernan, NickW: together, we made Puyo Nexus the place for a growing online competitive scene.

What's the most important skill for a Puyo Puyo beginner to master?

I think the most important skill to learn as a *Puyo* beginner is your ability to visualise how chains will pop before you pop them – in other words, the ability to visualise how gravity will affect the Puyos. If you work on developing this skill, your chaining ability and creativity will rapidly develop. Developing this 'chaining sense' is a lot more convenient nowadays than a lot of people think.

I think the beauty of *Puyo Puyo* is that there aren't any mysterious techniques locked behind not-so-obvious stuff, such as hitboxes, RNG quirks, or combos with heavy execution requirements. If you keep watching professional *Puyo* players, I think you're guaranteed to eventually develop a good sense for different possible patterns and build orders.

Which is your preferred version of *Puyo Puyo*, and why?

Right now, my preferred version of *Puyo Puyo* is *Puyo Puyo Tetris*. *Puyo Puyo Tetris* is the only *Puyo* game on HD consoles, so it's the version I'll have to be practicing on for tournaments anyway; and since it's the only *Puyo* game on current-gen home consoles, it also has the best netcode.

Why do you think the *Puyo Puyo* games have remained popular for so many years?

I think *Puyo Puyo* has stayed popular because it's a masterpiece in terms of artistic direction and videogame design. I remember reading somewhere that, during *Puyo Puyo*'s development, Moo Niitani did research in arcades and noticed how people loved shouting along with the characters. So he put in the characters from *Madou Monogatari*, made them trash talk each other in typical anime fighting game fashion, and when you're playing well you get to hear Arle yell, 'Bayoen!' over and over.

The second reason I'd attribute for *Puyo Puyo*'s success is that the competitive puzzle mechanics are perfect in a way that elevates it above the competition. *Puyo Puyo* hasn't had a significant balance patch to the tournament standard ruleset since 1994, so that's got to be suggestive of some serious perfection, right? I think the best way to explain *Puyo Puyo*'s perfection is that it does a very good job of making all its high-level techniques arise out of its basic mechanics. There's lots of patterns used by experienced players to make chaining easier, but you don't necessarily need to go out of your way to learn them.

My expectation for *Puyo Puyo* is for it to grow into a classic game, like *Chess* or *Go*, which people of ages can enjoy. My dream is to be that old man sitting in the park beating all the kids at board games. Except instead of board games it's a Nintendo Switch with *Puyo Puyo Tetris*!



» [Switch] A tip from us, dear readers: if you ever see Nick offering you to play against him in *Puyo Puyo Tetris*: run. Run far away. Run for your life.

▶ 1999's *Puyo Pop* for the Neo-Geo Pocket Color was the first Western *Puyo Puyo* game that arrived with its own identity intact. However, by then Compile's most famous creation no longer belonged to Compile. Dire financial trouble saw the company sell the copyright to Sega in 1998, and for the next two years it would develop *Puyo Puyo* games under licence. Since Compile's bankruptcy, Sega has handled development of the series internally at Sonic Team, starting with *Puyo Pop* for the Game Boy Advance. After a few years, Sega ceased to market the series in the West, with fans having to make do with imports again following *Puyo Pop Fever*.

Despite the ownership turmoil and lengthy Western absence, the series is still going strong. Japan received the latest game in the series, *Puyo Puyo Chronicles* for the 3DS, at the tail end of 2016. Despite the free-to-play mobile phone game market being saturated with puzzle games, *Puyo Puyo Quest* is one of Sega's most lucrative free-to-play games in its home market. *Puyo Puyo* also returned to the Western market in 2017 as part of the surprising crossover game *Puyo Puyo Tetris*, an outstandingly comprehensive puzzle game which has been warmly received by us as well as the wider games press – it earned a Retro Gamer Sizzler for its 90% score in issue 168.

The series' recent return is why there has never been a better time to get into *Puyo Puyo*, too. *Puyo Puyo* is at its best when played against other people, and with interest in the series at a peak right now, competition is relatively easy to find. The game hasn't changed a great deal over the last couple of decades, but no matter if you first experienced the series with Dr Robotnik, Kirby or *Qwirks*' Wuzzle, the timeless quality of the game design is undeniable. So gather some friends, share out some jelly beans to set the mood, and prepare for a multicoloured mixture of the saccharine and the savage. Just don't invite us – we'll wreck you and spoil the fun. ✱

> **"The competitive puzzle mechanics are perfect in every way"**
> Phong Tran

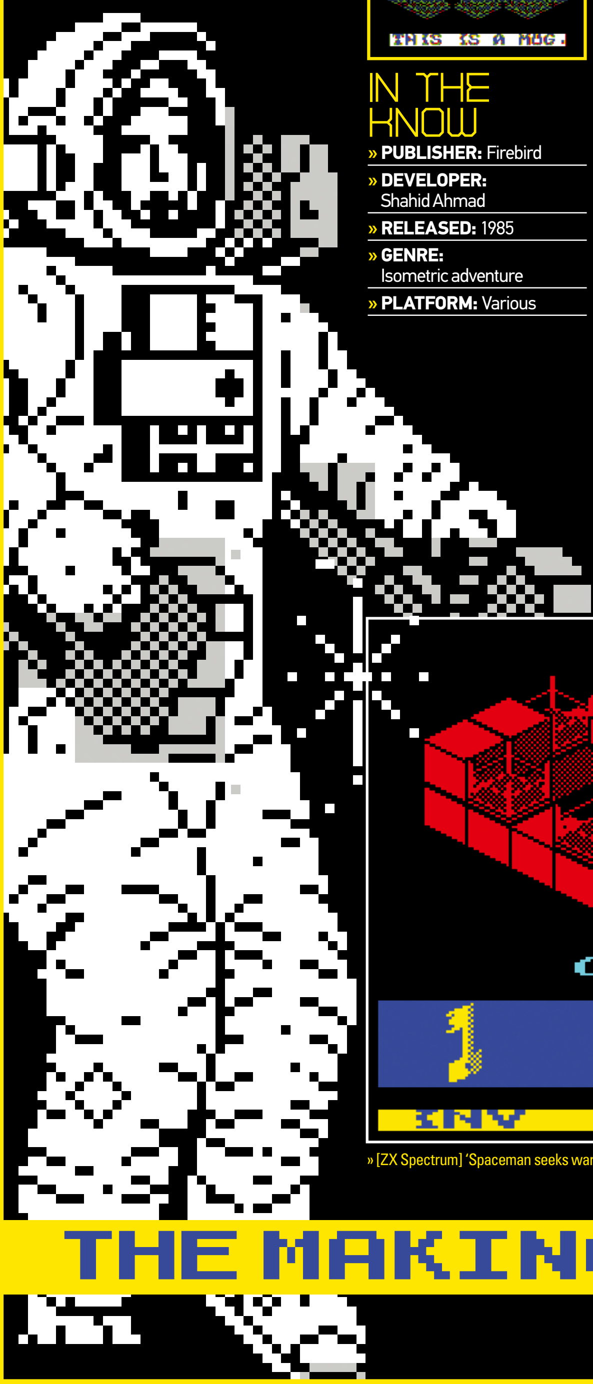
CHIME

They say in space, no-one can hear you scream but Shahid Ahmad had other ideas. Paul Drury leaves a breadcrumb trail as he explores the ghost ship Chimera



IN THE KNOW

» **PUBLISHER:** Firebird
» **DEVELOPER:** Shahid Ahmad
» **RELEASED:** 1985
» **GENRE:** Isometric adventure
» **PLATFORM:** Various



Shahid Ahmad had spent most of the morning screaming at his ZX Spectrum and finally, throat shredded and barely able to talk, he was happy.

"I had told my family I was going to my bedroom to do 'something odd' and not to worry about it," he grins. "I put a crappy microphone into the Spectrum's port, instead of a cassette player, and spent two hours screaming into it. I adapted my turbo-loader code to create this sample and when I died in the game and heard that scream, I shat myself. I thought, 'This is great!'"

It wasn't the first time making games had given Shahid cause to vent his frustration. Having produced a few low-key titles, he had landed the contract to convert *Jet Set Willy* to the Commodore 64. It should've been his big break, but despite turning the port round in three hectic weeks, he felt deflated at the end. "It was rushed, there were bugs, they didn't pay me what my work was worth and I just felt disillusioned," he admits. "I was close to giving up videogames in 1984, but then in December that year, I saw *Knight Lore* and the fire came back! I couldn't believe what I was seeing and I knew I had to try to rip it off."

This wasn't a question of hacking Ultimate's seminal isometric adventure but rather a technical challenge to create an engine capable of recreating those startling visuals. Recognising the Spectrum was the big player in the games market of the day, he began learning to code in Z80, wrote his own sprite editor and was soon constructing his spaceship setting, room by room. "I was into science fiction and was already working on *Chimera* when *Alien 8* came out," says Shahid. "I wanted to do a robot game though I couldn't make up my mind if you were supposed to be a spaceman or a robot so I thought, 'Whatever people believe it is, that's what it is!'"

This would explain why your character looks suspiciously like Eighties TV android icon Metal Mickey but still needs to eat and drink to stay alive aboard this alien vessel. It was a feature that only came later, however, as Shahid's first version of the game successfully mimicked the look of Ultimate's

> "I was close to giving up videogames in 1984"
> Shahid Ahmad

'Filmation' titles, but not the gameplay. "I sent it to Colin Fuidge at Firebird, convinced I'd get a deal, and he said no. I couldn't believe it, but instead of being utterly crushed, I demanded a meeting. He told me it just wasn't fun. I said, 'Give me two weeks and I'll give you something you'll want.'"

Shahid realised in his rush to match the technical achievement of *Knight Lore*, he had essentially produced a demo rather than a compelling game. Time pressure was added by the need to collect bread and tea to keep your food and water levels up. Some objects needed combining with others to either clear a way forward or create a new item. Then there were the radiators that drained your water, the electrified fences, the giant toaster, the Jack in a Box, and, of course, the memorable speech samples.

"I took it back to show Colin and when he loaded it up and heard it say 'Chimera' on the title screen, he leaned forward and smiled. Then he started playing, died, heard the scream and shouted, 'Jesus!' He banged the table, turned to look at me and started nodding. That was it. He knew they had to have it. The scream had got him!"



» [ZX Spectrum] 'Spaceman seeks warhead for unilateral destruction'.





» [ZX Spectrum] That key looks useful…

Shahid proudly notes *Chimera* was the first *Knight Lore* clone to hit the market, as far as he knows, and even paid homage to Ultimate's habit of revealing their next title on the end screen by announcing *Pandora*, a sequel of sorts, which would appear on the C64 in 1988. He handled all the conversions and though he did address some issues, such as sprite-masking, he is the first to acknowledge the game could've been better. "There are a million things I could've done," he sighs. "I should have added more of a story, teleporters, the ability to jump, easier controls, a proper map… people tell me they have fond memories of *Chimera* and I think, 'Why?' They say it's how the game made them feel, kind of psychologically uncomfortable. All I see are the flaws!"

Despite this, *Chimera* holds a special place in Shahid's heart. To mark the game's 25th anniversary, he began work on a remaster for the PC and Mac, and you can find the story at chimera2010.com. He still mulls over ways to revisit the game on modern consoles and despite working on scores of games over the last three decades, he is delighted to be talking about the game that made him rediscover his passion.

"Probably the happiest day of my game-making life was when I left the Firebird office after they'd agreed to commission *Chimera*," he smiles. "I was close to tears and screaming with joy, and because of that day, I stayed in games."



CHIMERA 101

■ Set on an alien spacecraft, you are tasked with assembling four warheads from parts scattered across the ship, placing them in specific rooms and then making good your escape before detonation. Between you and success are numerous obstacles and item-based puzzles plus an ever-decreasing food and water supply to manage.



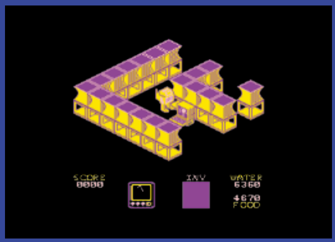
CHIMERA CAPERS

Shahid revisits his four ports



COMMODORE 64 1985

■ "It's the best version and the most tuned for the machine it's on. I had become friends with Rob Hubbard and once I'd heard his music for *Mad Planets*, I wanted him for the C64 version. I said, 'I don't care what you do as long as there's fretless bass in there!' He did us proud."



AMSTRAD 1985

■ "There wasn't meant to be an Amstrad version but I said to Colin at Firebird I'd do it in a week! He looked at me like I was mad. Off I went and bought an Amstrad. It took eight days, which I got away with because I said programmers starting counting at zero."



ATARI 8-BIT 1985

■ "There wasn't a market for an Atari version but it was the first machine I owned and I turned it around quickly. It's the prettiest version but also technically the worst which is a shame because it does look beautiful. To this date, I'm ashamed I betrayed my first love."



WATARA SUPERVISION 1992

■ "My friend Foo Katan asked me if I could do something for this handheld, which had a 6502 processor. The biggest challenge was how blurry the screen was, but I think I did a reasonable job. Rather than me doing the scream, I got my brother to do it for this one!"

KING OF THE MAKING OF

Super GAME BOY

We briefly covered Nintendo's peripheral in issue 159, however, this Game-Boy-in-a-cartridge is so full of features that we felt it was worth revisiting. Lee Garbutt explains how it does more than colourise monochrome games



The original Game Boy is an iconic piece of hardware. Created by Nintendo's R&D1 team, the iconic grey breeze-block of fun is probably the greatest example of a mantra made famous by the creator of the Game & Watch, Gunpei Yokoi: "Lateral Thinking with Seasoned Technology." This way of thinking describes the idea of using older, cheaper technology in new and exciting ways, and just as it led to the creation of the Game Boy itself, it is also likely to be the same train of thought that saw the system repurposed as a peripheral for it's bigger console sibling, the SNES.

For those who had been enjoying the Game Boy for many years, the Super Game Boy was a tantalising prospect: an easy-to-use peripheral for the SNES that could display inserted Game Boy cartridges onto a television screen, and, along the way, potentially provide audio, visual and even gameplay improvements. No more did you have to rely on decent interior lighting to be able to play your monochrome games. It was possible to play arguably the greatest version of *Tetris* on the big screen, with no battery pack to hold you back.



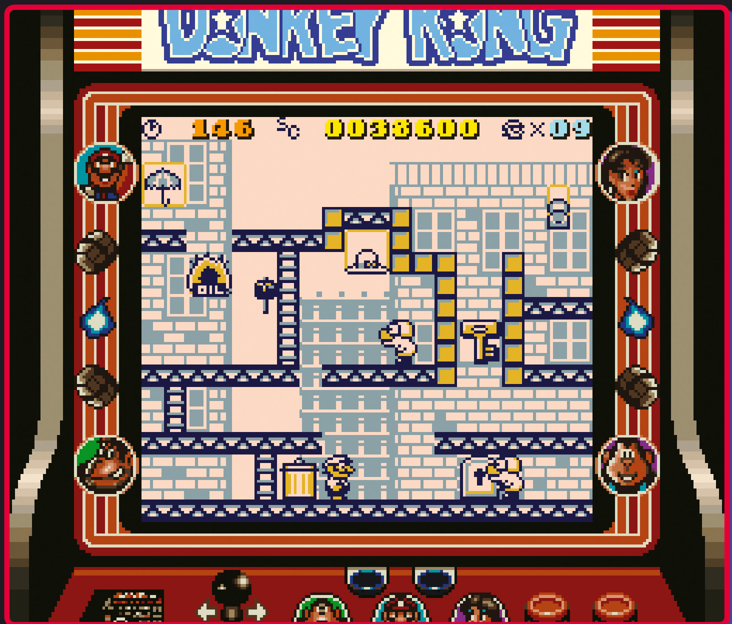
Developed in partnership with peripheral manufacturer Hori, the Super Game Boy cartridge itself featured the same Z80 microprocessor that powered the original portable (and many other consoles and arcade cabinets at the time), as well as a cartridge slot that was designed to house original Game Boy cartridges only. It was almost identical to the original portable device in every way, except that it ran slightly faster due to using the SNES's clock speed for timing – and you can tell, as audio would be played at a slightly higher pitch than normal. It also lacked the original system's EXT connection, prohibiting the ability to link to other Game Boys (or other Super Game Boys, for that matter) for multiplayer gameplay.

After booting up the peripheral with a game inserted, the most obvious feature was the use of borders. There were nine built-in borders, and even a custom border where you could doodle your own designs with the controller or SNES Mouse. This feature was mainly useless as you couldn't save your prized artwork, but the official Super Game Boy Players Guide helpfully points out that you could connect your SNES to a video cassette recorder and commit it to videotape for posterity. Outside of the default frames, developers could also create multiple game-specific borders that could be called up by the Super Game Boy when required. Some games had different borders depending on the level being played, while *Mario's Picross* featured a selection of hidden borders based on the different-coloured 'Play It Loud' Game Boys, which were selected by using different combinations of the D-pad and Start button to bypass the title screen.

The border-related Easter eggs wouldn't stop there. When it came to built-in borders, most of them would start to animate if left idle. Leaving the theatre border would show members of

REVISION REVISION

The Super Game Boy came in different forms, let's take a look at them



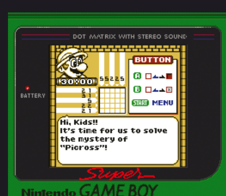
» [SNES] *Donkey Kong* was the first Super Game Boy game to use enhanced features.

> **"After booting up the peripheral, the most obvious feature was the use of borders"**

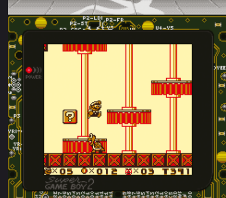
the audience falling asleep, with some patrons pulling out their own Game Boys for a multiplayer session. Meanwhile, a border featuring an exterior scene would go through an entire cycle of day and night.

A range of colour palettes was the Super Game Boy's other main selling point. Since 1989, Game Boy owners could play their games in any colour they liked, so long as it was various shades of green (until the superior black-and-white display of the Game Boy Pocket was made available in 1996). It's competitors tried in vain to claim superiority by offering proper full colour screens, but to no avail. However, fans wanted a colour Game Boy for years. With the Super Game Boy, though, they could sort of have their cake and eat it, being able to play any standard Game Boy release in other colours. You could pick from several predefined palettes, ranging from the green hues, to black and white, or shades of bright pink if you wanted *Kirby's Dream Land* to feel authentic. It was possible to create your own colour schemes, too, changing each of the four shades to a number of different colours, but without a save battery, players had to write down a passcode to save their scheme. Loading up certain games, such as *Super Mario Land* and *Metroid II: Return Of Samus,* would load up preset palettes, bringing new life to older software.

But the big deal was the games that came after the Super Game Boy's release, that were specially designed to take advantage of the enhancements available to developers that took the time to code support for the peripheral.

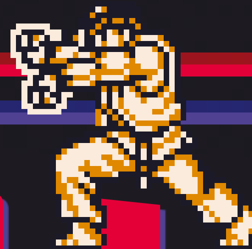














Super GAME BOY

(EUROPE/JAPAN), 1994

■ Much like the Japanese Super Famicom and European Super Nintendo systems, the original design is smooth, sleek and also runs slightly faster than original Game Boy hardware, due to an issue with clock speeds. You can correct the problem with a hardware modification to the peripheral.



Super GAME BOY

(NORTH AMERICA), 1994

■ The North American version contains the same internals as the European/Japanese unit (and the same speed issue), only the external shell has been given a blockier, more angular design to keep with the aesthetic of this region's Super Nintendo console. Not a hint of purple to be seen, though.



Super GAME BOY 2

(JAPAN), 1998

■ This second revision never officially made it to the West, but it's a vast improvement: featuring new borders and a much-needed link cable port. Most importantly, it also fixes the speed issues of the original. This is definitive way to play Game Boy games on your SNES, if you can find one.

Super GAME BOY



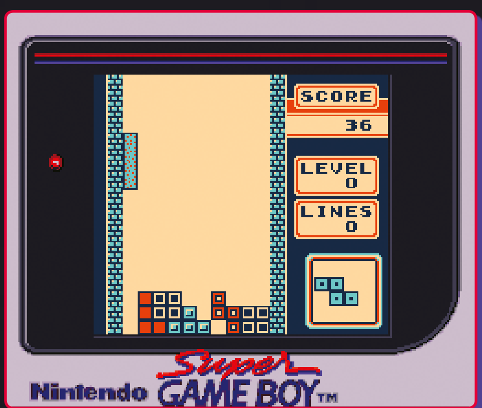
Super GAME BOY COMMANDER

(JAPAN), 1994

■ Released in Japan alongside the Super Game Boy, this Hori-developed controller looks like the bottom of a real Game Boy and it provides easy access to the peripheral's menus. As a bonus, it is the only way to activate hidden slow and mute modes at a touch of a button.

Donkey Kong (also known as Donkey Kong '94) was the closest thing to a killer app that the Super Game Boy could show off. Not only was it an absolute corker of a game in it's own right, it made excellent use of the Super Game Boy's abilities. With a bit of trickery, it was possible to display more than four colour shades on the screen, by splitting the display into smaller grids in the background and assigning individual colour palettes to those smaller areas. It featured a beautiful border that was a pixel representation of the original *Donkey Kong* arcade cabinet, and it also featured snippets of sampled speech. It was the best way to show off what was possible with the Super Game Boy, but sadly it remained as the only game that really went all out in terms of support.

While other games fell short of *Donkey Kong '94*'s example, many developers did at least try to implement at least some form of enhanced functionality for Super Game Boy owners. Many games like *Street Fighter II*, *Wario Blast* and *Killer Instinct* enabled multiplayer games to be played using multiple SNES controllers, to make up for the Super Game Boy's lack of a link port. In *Wario Blast*'s case, you could even use a multitap to play with up to four players, as every *Bomberman* game is legally required to have it as a minimum. Thinking about it, why you'd play some of these fighter ports on a Super Game Boy instead of their original SNES versions? We have no idea.



» [SNES] Many later *Tetris* games received multiple border options. The original *Tetris* isn't one of them.

Audio was another facet that could be enhanced, as games could use the SNES to play 16-bit sound effects and speech, and in a handful of games, such as *Animaniacs* and *A Bug's Life*, developers could squeeze in entire alternative soundtracks that would use the host system's superior sound chip to provide much better sounding music. However, like many of the Super Game Boy's enhancements, it was rarely utilised, likely as it meant sacrificing much-needed cartridge space.

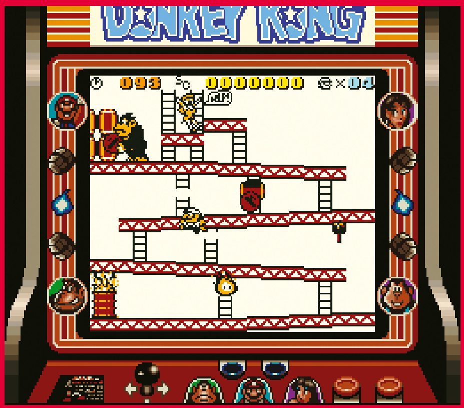
But the most technically impressive thing that was ever achieved with the Super Game Boy was for a rather simple purpose. Taito's Game Boy port of *Space Invaders* was as faithful a conversion of the arcade classic you could get on a tiny 160x144 pixel screen, but when inserted into the Super Game Boy, it became a more substantial package. Booting up the game would give you two options, with the first being a Super Game Boy-enhanced version of the cartridge, offering up further modes based on the original monochrome version, a colour version, and a version that emulated the cellophane strips taped to certain revisions of the black-and-white cabinet in a bid to give it some colour.

The second option, was 'Arcade'. This would bring up a loading screen, before booting up a full SNES game, squeezed onto the humble Game Boy cartridge. Featuring the three screen modes available on the Super Game Boy version, it also added an additional upright cabinet mode that featured a full-colour background. Strangely, an almost-identical version would be released as a standalone SNES title in 1997, adding a multiplayer mode. Ultimately, these are all different visual variations on the same game, but the idea of having a proper SNES game on a tiny Game Boy cartridge was a brilliant idea, albeit one that was never repeated.

Support continued even as the Game Boy itself began to fade into its twilight years – which would have been a lot sooner if it weren't for *Pokémon*. The game's massive success basically gave the portable a whole new lease of life, and over in Japan as part of that, a second Super Game Boy revision was released. Now in a clear blue shell with status LEDs and also sporting

ESSENTIAL GAMES

These supercharged titles made you want to own a Super Game Boy



DONKEY KONG '94

NINTENDO

■ Starting as a fairly faithful port of *Doney Kong*'s debut, before becoming a platform puzzler, the first release to support the Super Game Boy remains one of its best showcases, boasting an improved colour palette, sound effects and a border – modelled on the original's arcade cabinet.



SPACE INVADERS

TAITO

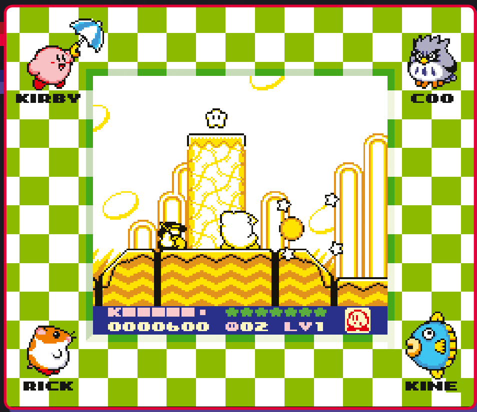
■ Featuring various barebone versions of Taito's original shooter, *Space Invaders* would otherwise be a truly unremarkable release. However, this seemingly standard Game Boy cart includes a SNES version of the compilation which can be booted via the Super Game Boy. It's the only game to utilise this unique feature.



ANIMANIACS

KONAMI

■ A tiny amount of games implemented alternative soundtracks when played with the Super Game Boy, and Factor 5's port of the Mega Drive's *Animaniacs* game does it best. This uses the Super Nintendo's sample-based sound chip for renditions of the original Sega game's FM synth soundtrack.

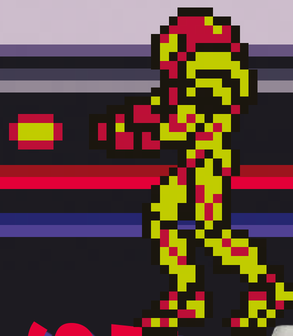


» [SNES] *Kirby's Dream Land 2* was one of several games that made special use of the Super Game Boy's internal sounds.

a link cable port that was clearly provided in response to *Pokémon*'s success – allowing Pokéfans to finally trade and battle on their Super Game Boys – this new version played games in the correct speed and even added a whole new selection of borders to replace the old ones (although the original selection could be brought back with a simple cheat code). A handful of games, like *Tetris DX,* display a different border if played on the Super Game Boy 2 as opposed to the original peripheral, but again, this was another underutilised feature.

Sadly, this definitive edition remained in Japan. Although rumours persist on the internet that it did find its way into North America in very limited supplies through the shopping channel, QVC, there is no concrete proof that a Western release ever existed.

By the time the Game Boy was replaced by its purple-hued 'Color' version, the Super Game Boy never really lived up to its potential. No developer (including Nintendo) ever took the effort to truly enhance their Game Boy games with anything more than custom borders and alternative colour palettes. But the chance to play these portable games on the big screen was reason enough for its existence – everything else was just icing on the cake. *



THE SUPER GAME BOY'S LEGACY

How the peripheral impacted other Nintendo hardware



WIDE BOY/WIDE BOY 64 (NES/N64)

■ Nintendo's in-house Intelligent Systems studio developed a series of development tools that enabled Game Boy games to be played on the NES (Wide Boy) and Nintendo 64 (Wide Boy 64) respectively, with the N64 version supporting Game Boy Color games (with a later version supporting GBA games). These peripherals were intended for developers and the press, and they weren't available to the general public.



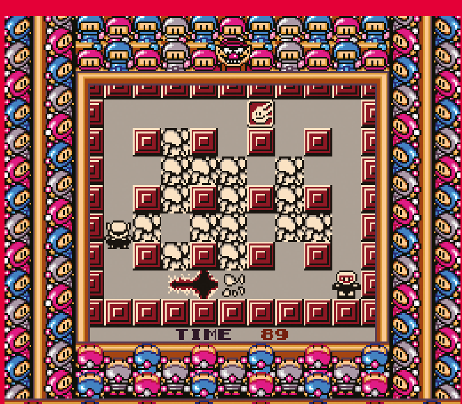
GAME BOY PLAYER (GAMECUBE)

■ This peripheral neatly attached to the underside of your GameCube. It wasn't quite as feature-packed as the Super Game Boy, but as it contained Game Boy Advance hardware within, it supported games for the Game Boy, Game Boy Color and Game Boy Advance systems – (you could even link with real systems, thanks to the Game Boy Player's EXT port.



NINTENDO SWITCH

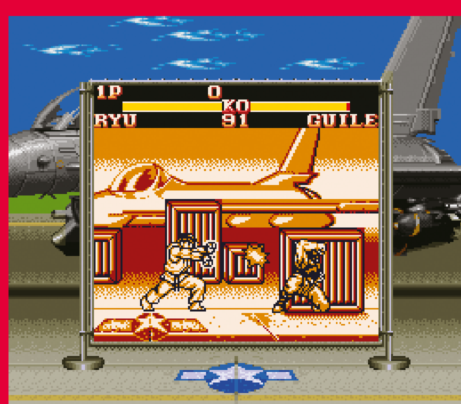
■ Nintendo's latest console takes the Super Game Boy's idea of being able to take software between a home console or portable device and flips it around to provide that functionality at a hardware level. The result is a portable system that can be played while on the bus/plane/toilet, and can also connect to a television as a home console.



WARIO BLAST

NINTENDO

■ When localising the Japanese version of *Bomberman GB* for the West, Nintendo loaned out *Wario* to Hudson Soft for this portable presentation of pyrotechnics. Using the Super Game Boy and a multitap peripheral, up to four friends could play the game's Battle Mode.



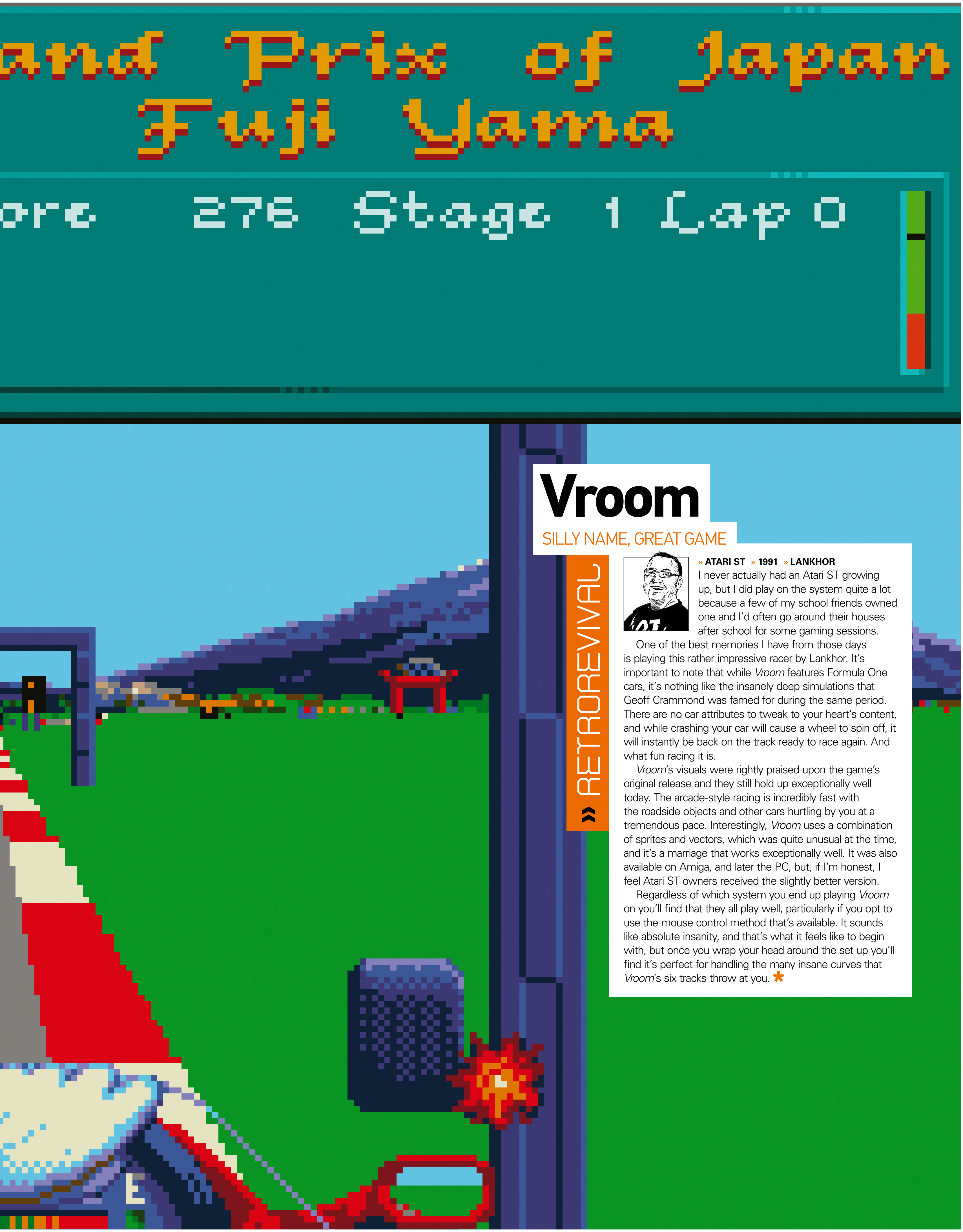
STREET FIGHTER II

CAPCOM

■ This ambitious, but underwhelming, arcade port just can't compare to the home console versions. That said, it features some clever Super Game Boy implementation via multiple borders that are ripped from the SNES game's backgrounds for each character, changing as you fly to each fighter's stage.




4.359 Km



» RETROREVIVAL

Vroom

SILLY NAME, GREAT GAME

» ATARI ST » 1991 » LANKHOR

I never actually had an Atari ST growing up, but I did play on the system quite a lot because a few of my school friends owned one and I'd often go around their houses after school for some gaming sessions.

One of the best memories I have from those days is playing this rather impressive racer by Lankhor. It's important to note that while *Vroom* features Formula One cars, it's nothing like the insanely deep simulations that Geoff Crammond was famed for during the same period. There are no car attributes to tweak to your heart's content, and while crashing your car will cause a wheel to spin off, it will instantly be back on the track ready to race again. And what fun racing it is.

Vroom's visuals were rightly praised upon the game's original release and they still hold up exceptionally well today. The arcade-style racing is incredibly fast with the roadside objects and other cars hurtling by you at a tremendous pace. Interestingly, *Vroom* uses a combination of sprites and vectors, which was quite unusual at the time, and it's a marriage that works exceptionally well. It was also available on Amiga, and later the PC, but, if I'm honest, I feel Atari ST owners received the slightly better version.

Regardless of which system you end up playing *Vroom* on you'll find that they all play well, particularly if you opt to use the mouse control method that's available. It sounds like absolute insanity, and that's what it feels like to begin with, but once you wrap your head around the set up you'll find it's perfect for handling the many insane curves that *Vroom*'s six tracks throw at you. *

Minority Report

INTERESTING GAMES YOU'VE NEVER PLAYED

TEXT ADVENTURES

Text adventures are unexplored territory for most retro gamers. Chosen by Craig Grannell, here's a grab bag of classics and quirky lesser-known titles to try, from the days before point-and-click took over

THE PAWN

■ DEVELOPER: **MAGNETIC SCROLLS** ■ YEAR: **1985 (SINCLAIR QL)/1986 (OTHERS)**

■ In a roundup of text adventures, it might seem strange to lead with a game that dazzled people with its visuals – but we're going to do that anyway. Although *The Pawn* was originally text-only on the Sinclair QL, it was the subsequent ports to the Amiga and Atari ST that left gamers slack-jawed. Released into a world where Infocom dominated quality storylines and parsers, and where most adventures with graphics offered only crudely drawn depictions of your surroundings, *The Pawn* was something else.

After a terrific title screen, the game leaves you on a gravel path, with a view over grassy fields towards snow-capped mountains. Squint from a distance and it almost resembles a photograph. Reportedly, this and other images within the game – a gorgeous palace garden; a terrifying twisted forest – each took the artist three days to complete.

More surprisingly, although some conversions to less powerful systems lacked such artwork, the visuals arrived on the C64 in fine style. In fact, the delicate pixel work for that version in many ways outshines the 16-bit originals.

But enough about the graphics, lovely though they are, because the meat of any adventure is its story. *The Pawn*, backed by a novella, finds you stranded in the troubled Kervonia. The king's losing control of his kingdom, and conspiracies abound, from assassinations to economic spats surrounding dwarf-crafted whisky and rival ales.

Throughout, the writing is superb, with rich, descriptive prose. No sooner have you taken a few steps than you're told: "Kronos the magician zooms past on a circular stone platform that hovers above the ground, executes a steep, banked turn and glides to a halt in front of you." Although interactions with Kronos and Kervonia's other denizens often prove swift and cryptic, and the game map is small, *The Pawn*'s world feels fully formed. And, importantly, figuring out what to do is tough. How do you pass a stoic snowman that guards an entrance? How should you deal with an adventurer who rides a legless horse? Is it even possible to move a bloody great big rock when armed only with gardening tools and the shirt off of your back?

The parser is excellent, too (an early highlight has the game understand 'plant pot plant in the plant pot'), ensuring brainpower goes into solving puzzles rather than communication. And this is all more astonishing when you consider *The Pawn* was a Magnetic Scrolls' debut.

Naturally, there are slips here and there: notably, dead-ends favoured by adventure creators in those days – hint: don't read someone else's mail early on. But in an age when people remember Infocom above everything else, we'd have been remiss to have not championed *The Pawn*; it reinvigorated adventures, and in hindsight provides the seeds for quality art within the genre that would eventually find it morph into point-and-click interfaces.



» [C64] The guru laughs at your wristband. Frankly, his fashion sense suggests he's not the only one that should emit a loud guffaw.



» [C64] This character is not so much 'Frosty the Snowman' as 'Move And I Will Kill You In The Face Snowman'.

IF YOU LIKE THIS TRY…

THE GUILD OF THIEVES

VARIOUS



■ A follow-up to *The Pawn*, also taking place in Kervonia, this title tasks you with gaining admission to the titular guild. In order to do so, you need to loot items from various locations, including a castle. Again, you get cleverly-constructed puzzles and an excellent parser, along with lovely imagery.

JINXTER

VARIOUS



■ This game leaves Kervonia far behind, instead merrily immersing itself in a bizarre mash-up of fantasy and something mirroring the real world. Witches want to derail society by eradicating luck, and it's up to you to stop them. Cue a tough, personality-infused, atmospheric and often-entertaining adventure.

CORRUPTION

VARIOUS



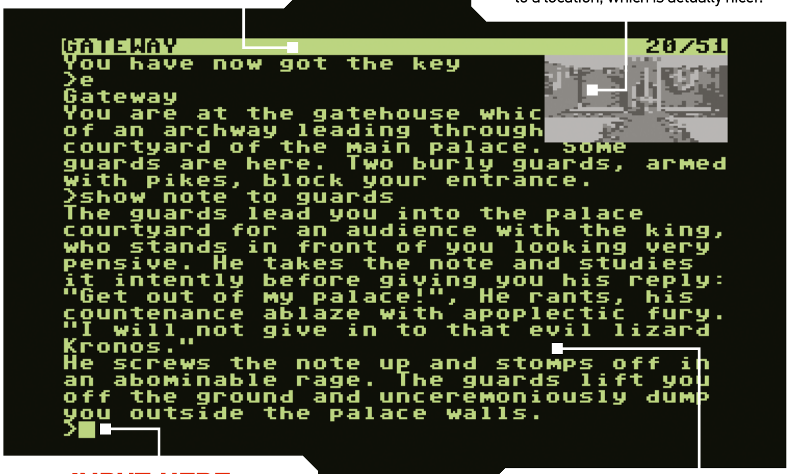
■ This rather more down-to-earth title finds you in London, revelling in a time of shady deals and fast cars. Although lacking much of the humour of other Magnetic Scrolls titles, there's a palpable sense of atmosphere as you set out to prove your innocence, having been charged with insider dealing.

STATUS BAR

■ Across the top of the screen you'll see your current location, score, and how many moves you've made. The move count is vital: some parts of the game are time-sensitive, so don't be late.

VISUAL AID

■ On beefier computers, you can drag down images from the top of the screen. The C64 gives you a little thumbnail on repeat visits to a location, which is actually nicer.



INPUT HERE

■ Again, it's a text adventure, and so the interface isn't tricky. Type what you want to do at the prompt, unless that's 'smash head into desk' due to a tricky puzzle.

TEXT HAPPY

■ Lots and lots of text. Well, what did you expect in a text adventure? Neatly, the game won't bother you with verbosity once you've already been to a location. Handy.

Minority Report

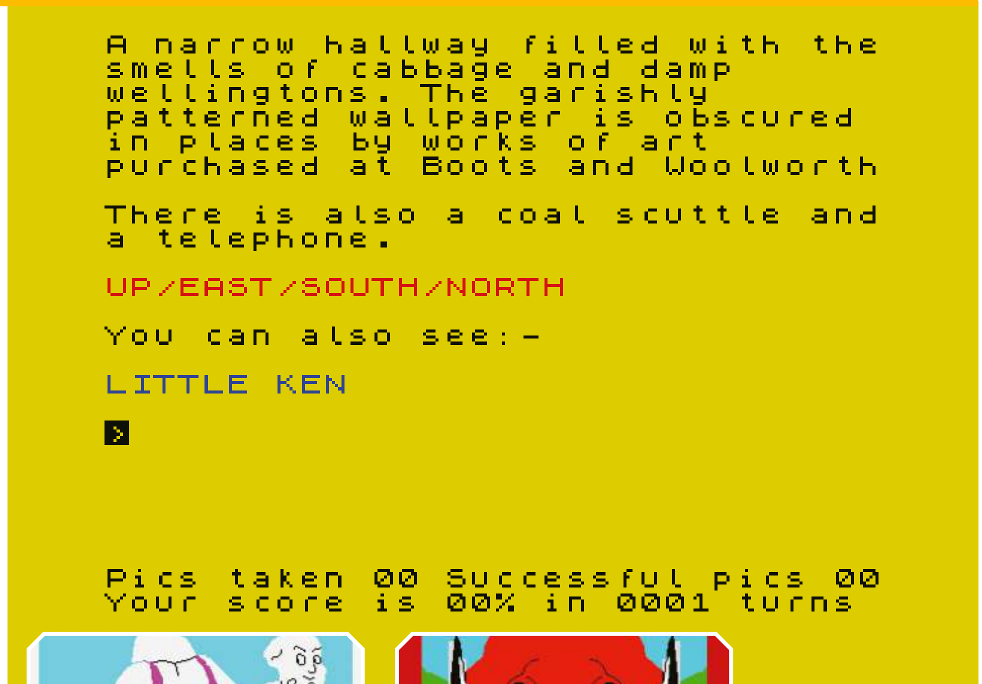
TERRORMOLINOS

■ PUBLISHER: **MELBOURNE HOUSE** ■ YEAR: **1985**

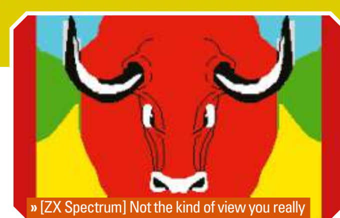
■ One of the least sophisticated games in this Minority Report (with a limited parser that will, at times, have you want to 'punch wall'), *Terrormolinos* makes this selection in part through being the most British. In the Eighties, it was still perfectly acceptable to create games chock-full of red telephone boxes and bin men. In this adventure, the subject was the 'classic' package holiday. And we use scare quotes quite deliberately in that previous sentence.

The game starts with a taxi impatiently parping away outside of your house in Slough, and finds you doing some very last-minute packing. Assuming you don't blunder into one of the many dead ends – such as nearly breaking your neck due to a dodgy stepladder, accidentally leaving a family member behind, or forgetting your passport – you'll jet off to sun-kissed lands, booking into the worryingly-named 'The Excrucio'. You can then enjoy the relative freedom of discovering the beauty of Spanish beaches (and sunburn), discovering terrifying spiders that lurk in wine cellars, and finding out why it's not a great idea to get on the wrong side of a rampaging bull.

Given its simple puzzles, limited set of locations, sense of personality and amiable nature, *Terrormolinos* is a good starting point for text adventure newcomers. It also neatly challenges you to find perfect snaps during your time away, which are 'developed' live on the screen. Their garish nature likely won't propel you into a nostalgic stupor for the 'good old days' of Polaroid (or, indeed, terrible holidays in the Mediterranean), but the gimmick's certainly more interesting than gawping at a badly-drawn house, field, or monster.




» [ZX Spectrum] It turns out the beach is a good place for some snaps – especially if a crab's biting someone's bottom.


» [ZX Spectrum] Not the kind of view you really want to be having on a relaxing holiday, unless you're David Attenborough.

MORE GAMES TO PLAY



» BUREAUCRACY

■ DEVELOPER: **INFOCOM**
■ YEAR: **1987**

■ You've probably played writing legend Douglas Adams' Infocom classic *The Hitchhiker's Guide To The Galaxy* – if not, do so now. We'll wait. This sci-fi adventure sees you deal with your fair share of bureaucracy – dealing with red tape that's occurred through a change of address. That might sound horribly dull, but Douglas Adams infuses the game with his trademark snark and humour, plus he throws in some absurd puzzles.



» WOLFMAN

■ DEVELOPER: **CRL**
■ YEAR: **1988**

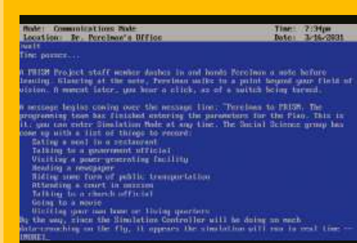
■ Having decided the thing text adventures were lacking in was gore, CRL embarked on a series of titles with gruesome animated visuals that got them slapped with 18 certificates in the UK – the static versions were, apparently, fine, if still bloody. Gimmick aside, *Wolfman*'s a decent chunk of interactive horror in three parts, one of which mostly involves trying to survive a night in bed with your lycanthrope sweetheart.



» FISH!

■ DEVELOPER: **MAGNETIC SCROLLS**
■ YEAR: **1988**

■ Although you're an interdimensional espionage operative, you like nothing better than living out your life in a goldfish bowl. But you receive a message that anarchist group The Seven Deadly Fins threatens your world's existence! And then it all goes a bit weird… well, weirder. In *Fish!*, you warp to other locations (and into bodies) to become an aquatic hero in a game with more fishy puns than you'll see in any other plaice.



» A MIND FOREVER VOYAGING

■ DEVELOPER: **INFOCOM**
■ YEAR: **1985**

■ Steve Meretzky's back catalogue is full of classics: *Hitchhiker's Guide*, *Planetfall*, *Leather Goddesses*. *A Mind Forever Voyaging* is less widely known, but is perhaps the most innovative of Steve's creations. More experience than game, it immerses you within a simulation of a futuristic USA. You discover how a political plan will affect the country. Spoiler: it's turned into a bit of a dystopia.

THE HOBBIT

■ DEVELOPER: **BEAM SOFTWARE** ■ YEAR: **1982**

■ The more sprawling *Lord Of The Rings* never had a chance on home computers. The series got as far as *Shadows Of Mordor* before slamming into a wall. But the more compact nature of *The Hobbit* made it fair game for text adventure fare; and in 1982, it blazed on to the ZX Spectrum and beyond, with its advanced 'Inglish' parser and graphical depictions of whatever you happened to be looking at.

Although comparatively archaic compared to the linguistic complexity in works by the likes of Infocom, *The Hobbit* was still one of the earlier adventures where you felt you had a fighting chance of typing something in and the game actually understanding you. Need to 'get sword'? No problem. Instead want a cohort to get the sword and brutally attack an enemy with it? Go for it, using suitably vivid language if you like. The result can make for a decidedly vivid game, closer to a book than the staid inputs of many older titles.

Really, though, *The Hobbit*'s mostly worth visiting (or revisiting) as an early example of a game world that feels real and alive. The graphics might be sparse, but objects can be combined, broken or placed inside each other, and the game's various inhabitants interact in the background. Which is a bit of a problem if a critical one gets horribly killed before you arrive. Still: realism!





» [ZX Spectrum] Whatever you might say about goblins, they're a dab hand at brightly lighting an otherwise drab and dark tunnel.



» [ZX Spectrum] It's fair to say that the bulk of *The Hobbit* isn't set in the cheeriest of locations.

RETRO STINKER

» THE FARMER'S DAUGHTER

■ DEVELOPER: **NOCTURNAL SOFTWARE** ■ YEAR: **1983**

■ Any number of terrible 'erotic' tales could take this slot, but this tale of a salesman trying to bed a farmer's daughter manages to be unpleasant, clunky, and devoid of entertainment.



» INGRID'S BACK

■ DEVELOPER: **LEVEL 9**
■ YEAR: **1988**

■ There's no place like gnome, but in this follow-up to the equally-impressive *Gnome Ranger*, you must face-off against an evil developer wanting to flatten your town. Across three parts, you must collect signatures from people who it turns out don't like you very much, set about stopping the nefarious villain's steamroller and its team of trolls, and then infiltrate the nasty chap's home to secure evidence for his downfall.



» GREMLINS: THE ADVENTURE

■ DEVELOPER: **ADVENTURE INTERNATIONAL**
■ YEAR: **1985**

■ Feeding your computer after midnight? You fool! Now you've got critters with sharp teeth to deal with. Or something. Okay, maybe not, but this adventure's a compelling take on the hit movie. The animated graphics aren't exactly Hollywood-level quality, but they do afford a sense of visual chaos to your terrifying night of survival. And, yes, film fans, there is a bit with a blender and a microwave.



» KENTILLA

■ DEVELOPER: **DEREK BREWSTER**
■ YEAR: **1984**

■ Another early text adventure grappling with basic imagery, Kentilla actually offers hints within its pictures. In need of a torch? You might see one lurking on a nearby wall, without having to bother with all that pesky 'examine' business. As for the plot, we're in fantasy land again, with you tasked with defeating the evil Grako, armed with only your sword and your wits. Play it on C64 and you get 12 minutes of Rob Hubbard bliss, too.



» DALLAS QUEST

■ DEVELOPER: **DATASOFT**
■ YEAR: **1984**

■ If you want to go 'ultimate Eighties' in your quest for text adventure goodness, load up *Dallas Quest*. After a take on the famous theme tune that feels like it's being strangled, you find yourself in front of Sue Ellen, who wants you to find a map of an oilfield. Cue plenty of skulking about, avoiding JR, and trying to not get your throat torn out by a giant rat (which we're pretty sure never happened in the show itself).

Future Classic

Modern games you'll still be playing in years to come



Info

- » **Featured System:** Nintendo DS
- » **Year:** 2005
- » **Publisher:** Nintendo
- » **Developer:** iNiS
- » **Key People:** Keiichi Yano (director), Atsushi Saito (art director), Takaharu Asai (Sound Design), Tetsuhide Okada (main program)

Go Deeper

- » For those that want to know, *Osu! Tatakae! Ouendan* roughly translates as *Yo! Fight! Cheer Squad.*
- » All the songs featured in *Ouendan* are actually covers, with the only exception being 175R's *Melody.*





» [DS] *Ouendan*'s stories may be in Japanese but they're incredibly easy to understand regardless of your fluency.

61. OSU! TATAKAE! OUENDAN

Few games can mix humour and poignancy as deftly as Ouendan. Darran Jones cheers for this quirky rhythm action game that will still have you manipulating your stylus for years to come...

THE BACKGROUND

You're probably asking why we're focusing on a game exclusive to Japan this month when a westernised version exists in the form of *Elite Beat Agents*. The answer is simple, really: *Osu! Tatakae! Ouendan* is region free and a far superior game, a game which deserves a place in every DS owner's collection.

When iNiS' vice president, Keiichi Yano first tried out Nintendo's new dual-screened console he knew it would be the perfect system for the new rhythm action idea he had. iNiS was no stranger to the popular genre having already worked on conversions of *Beatmania Da!!* and *Pop'n Music Da!!*, as well as the excellent PS2 game, *Gitaroo Man*. Despite the company's prowess within the genre, Yano still found himself having to pitch his brand-new concept to Nintendo in order to secure a publishing deal. It was a partnership that would continue with *Ouendan*'s sequel and its western spiritual successor, *Elite Beat Agents*.

With the pitch a success, Yano and his team began to evolve their idea, which focused on a cheer squad (the titular Ouendan) which would use its power to encourage citizens that found themselves in hopeless situations. The plight of the characters was played out via fantastic manga-styled cut scenes and would culminate in the upset person calling out a plea of 'Ouendan!' to summon the dancing squad. As it turned out, helping those beleaguered individuals was every bit as fun as watching their (sometimes hilarious) stories unfold.

THE GAME

The beauty of *Ouendan*'s success lies in its excellent manipulation of the DS' stylus to perform a number of intricate routines that range from tapping circles in the correct numbered sequence to successfully following a track in time with a rolling ball (the tracks of which get progressively more varied as *Ouendan*'s difficulty gradually ramps up). Songs also usually feature a spinner



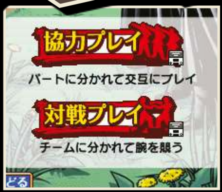
» [DS] Carefully follow the balls speed and direction and your score will jump significantly.



» [DS] Imagine if elections were like this in real life… actually, that's not a bad idea.

Things of note

MULTIPLAYER MADNESS



Although there are a number of multiplayer modes, they require each player to own their own copy of the game in order to fully enjoy them.

SEQUEL TIME



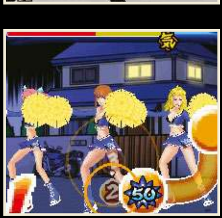
Moero! Nekketsu Rhythm Damashii Osu! Tatakae! Ouendan 2 arrived in 2007. It adds many of the improved mechanics that first appeared in *Elite Beat Agents*.

OUENDAN HEADS WEST



Ouendan's popularity resulted in *Elite Beat Agents*, a new game for the West. Although it features new mechanics, it lacks the charm of *Ouendan*.

DIFFICULT TIMES



A further two difficulty levels can be unlocked: Very Hard and Insane. Insane introduces an all-female American cheerleading troupe, the team speaks English in this mode.

BURNING RAGE



The flames signify the fiery determination of the characters. Constantly hitting your markers will cause the flames to rise and rise as the Ouendan performs its moves.



» [DS] *Ouendan*'s excellent grading system ensures you'll always want to beat your own score, whatever it may be.

(typically as part of a finale) that must be spun in time to the song's tempo, hopefully filling a number of required bars and gaining the player extra points if additional revolutions can be completed within the strict time limit.

Each marker that needs to be hit in *Ouendan* typically consists of two circles, which ideally need to be tapped when they completely overlap each other. Get your timing spot-on and you'll scoop yourself 300 points, while 100 points is earned if your timing is slightly off. Sloppy play will only award you a measly 50 points, while missing a note completely causes your squad to fall over and your multiplier to reset. *Ouendan* also requires you to keep an eye on your ever-decreasing energy bar, which will cause the song to end prematurely if it runs out. Timing your hits correctly will significantly replenish the constantly dwindling bar and also has an impact of each character's story, so you're going to need plenty of practice in order to constantly hit the required targets.

One of the great aspects of *Ouendan* is that its songs typically feature two to four breaks in them, which not only gives you a brief respite from all that frenzied tapping and tracing, but also allows you to enjoy the story that you've probably been too busy to pay attention while you've been mesmerised by your dancing cheer squad. If your energy bar is at least 50 per cent full, the song's character will receive a positive outcome that could range from creating an inspiring piece of pottery to punching out a gigantic Godzilla-sized mouse (no, really). Equally, a rating of 49 per cent or lower will result in a bad scenario happening and will also affect your overall score once the song is finally completed.

Regardless of how your final score ends up you'll find yourself itching to beat it again because every aspect of *Ouendan* is so polished. The difficulty is pitched perfectly, slowly increasing as you unlock more and more characters, while the songs themselves are an eclectic range of J-Pop tracks that perfectly match the onscreen stories they accompany. They're all beautifully presented, too, thanks to those aforementioned cutscenes that really add to your sense of achievement as you aim to get the highest possible grade. While we're discussing *Ouendan*'s 15 tracks we really need to mention the insanely beautiful *Over The Distance*, which is one of the most heartbreaking songs you'll ever tap a stylus to. It tells the tale of a young man who has died and gets a reprieve at the gates of heaven so he can say goodbye to his beloved one last time. It's a hauntingly beautiful piece of music that's a world away from the energetic tunes that pepper *Ouendan*'s soundtrack. Such is its poignancy, we fully understand why iNis dropped a song about rescuing a puppy, as failure to complete said tune would result in the doggy's demise. We're pretty sure our hearts wouldn't have been able to take it.

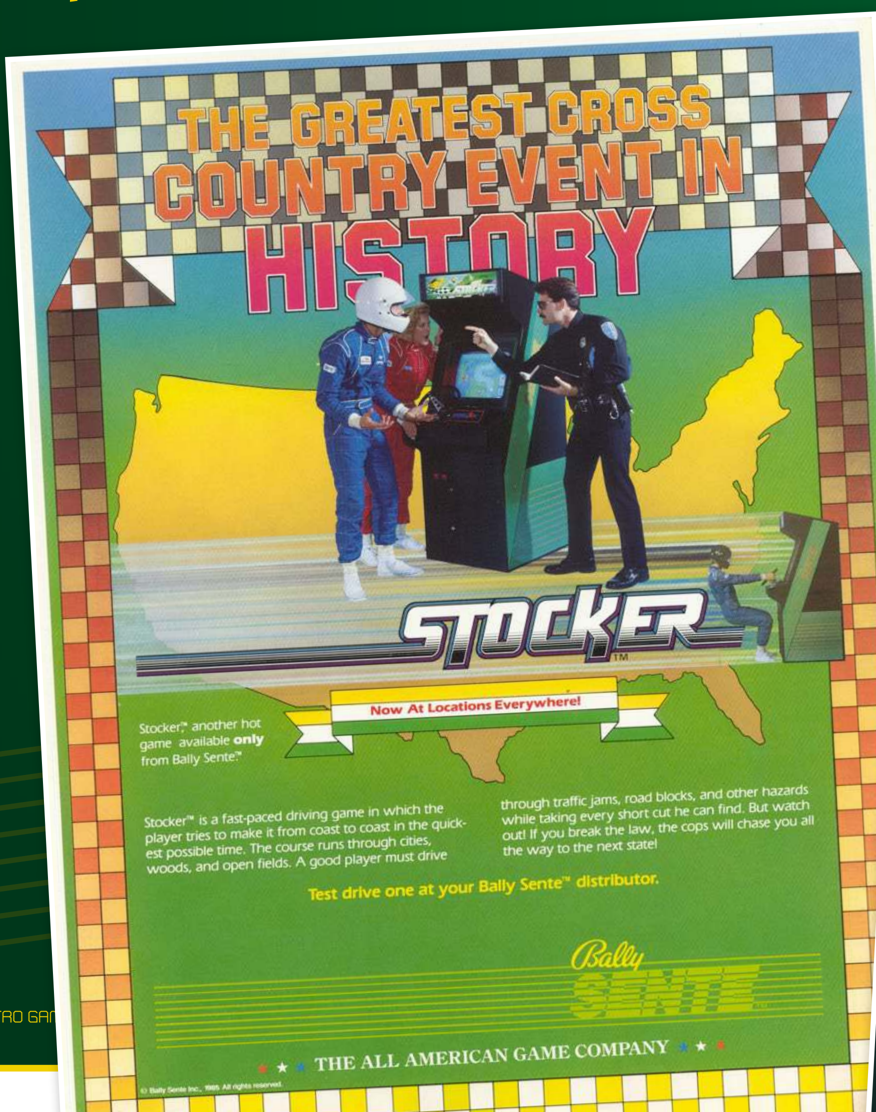
WHY IT'S A FUTURE CLASSIC

Ouendan may be 12 years old but it has lost none of its impact. It may lack some of the features that made it into its sequel and *Elite Beat Agents*, but we feel it has a far better mix of songs and far more personality compared to its peers. Challenging, but never unfair, *Ouendan* may lack content compared to other rhythm action games on the DS but the available songs are of such a high standard that repeated playthroughs is never an issue. iNiS has continued to work within the genre, most recently with the 2016 release of *Just Sing*, but we'd argue that it never achieved the same blend of playability and accessibility that it managed with the *Ouendan* series. Don't be scared by the language barrier, just pick up a copy and discover one of the best rhythm action games to ever appear on Nintendo's portable console. *

Bally SENTE

In the early Eighties many of Atari's biggest stars left the company in search of recognition and royalties. Companies such as Activision and Imagic are known to all, but Bally Sente remains obscure. Kieren Hawken is looking to change that…

In many ways it's pretty amazing that Sente Technologies has become so unknown, because when you look at the people behind this company it almost reads like a who's who of early arcade games. The founders of Sente were hardware engineer and programmer Howard Delman, one of the people responsible for developing Atari's legendary vector graphics system, Ed '*Battlezone*' Rotberg and Roger Hector, who also worked on *Battlezone* as well as developing new hardware for Atari, such as the unreleased holographic Cosmos console. Other alumni include Atari cofounder Nolan Bushnell, Lee '*Hard Drivin*' Actor, Dennis '*Sprint*' Koble and Owen '*Major Havoc*' Rubin. The company was formed as Videa Inc. in 1982 with a clear vision, as Roger explains, "We knew each other from Atari and had worked together there. Howie was a great hardware and software engineer, Ed was an amazing superstar programmer, and I was a designer/artist with experience







» [Arcade] Mini golf courses are a staple of amusement parks across the world, Sente decide to take it into the arcades too.



across several other areas of development. We decided to leave Atari as a group and start up our own creative engineering company and make games on our own. It was pretty exciting. Howie was VP of hardware, Ed was VP of software and I was in charge of art and admin as the president." Ed is keen to stress the reason why they decided to quit their positions at the-then industry leader, Atari: "[We] had seen how both Activision and Imagic had been formed, and we were already upset with the level of compensation for hit games that the designers and engineers were receiving, especially when compared to how well both Activision and then Imagic appeared to be doing. We had confidence not only in our abilities to create product outside of the Atari environment, but also to use our contacts in the industry to get contracts for work, so we decided to go off on our own." Howard echoes this, and reveals that they didn't just see themselves as rivals to their former employer. "These situations did lead to our decision to leave Atari," he says. "But we weren't just tied to videogames – our first project was a point-of-purchase merchandiser that ended up in Florsheim shoe stores!"

Unlike Activision and Imagic, the team at Videa (as the company was then called) didn't want to forget its arcade roots. "We always wanted to make games for both coin-op and consumer markets, " explains Roger. Leading manufactures Gottlieb had showed a very early interest in the team's first arcade game, *Pogos*, which was later renamed *Gridlee*. So what was *Gridlee*? Roger fills us in, "*Gridlee* had great promise as a concept. Originally called *Pogos*, it involved a series of characters which bounced from a 3D horizon towards the player who had to position a vertical shooting gun under the *Pogos* to blow them up before crossing a line at the bottom of the screen. It was fresh, original and [had] cool graphics." Unfortunately, this initial route into the arcades was fraught with disaster, despite some



» [Arcade] *Stocker* is an enjoyable top-down racer that was followed by two equally-excellent sequels in *Night Stocker* and *Euro Stocker*.

good ideas. Ed takes up the story: "We pretty much followed the same paradigm used at Atari in order to brainstorm a number of possible titles, and we decided, in a somewhat democratic fashion, that our first effort should be what turned out to be *Gridlee*. I honestly don't remember who came up with the concept for *Gridlee*, but Roger came up with the name and the character design. Howie's hardware design, which was the forerunner of the SAC-I system, grew out of the requirements for the game. Jon Kinsting was the lead programmer for that title and it was actually his first game title. As I recall, the deal fell through because the game simply did not earn well enough. Earnings in a test location are the final arbiter for things like this and *Gridlee* simply did not cut it." Howard adds to this with some reasoning of his own. "Also, Gottlieb had recently released *Q*bert*, which had both a similar look and play," he begins. "I also believe that Gottlieb left the games business while we were still discussing whether or ▶

INSTANT EXPERT

■ Sente's Dennis Koble and Lee Actor went on to form Polygames and develop the best selling *PGA Tour Golf* series for EA.

■ The *Street Football* arcade game was featured in the 1988 Jodie Foster film *The Accused*.

■ Sente didn't just develop videogames, it also created quiz machines, interactive photobooths, amusement rides, slot machines and even an exercise bike.

■ For six months, Sente was a division of Atari cofounder Nolan Bushnell's Pizza Time Theatres restaurant company.

■ The two Atari 2600 games it developed were sold to no less than three different companies without ever being released.

■ Sente was the first company to develop an interchangeable cartridge based arcade system, years before SNK and the Neo-Geo.

■ The Sente Super System (AKA SAC-III) was based on the 16-bit Commodore Amiga computer.

■ Many of Sente's arcade games featured adverts for missing children that were specially focused on the local area the machine was placed in.

■ Sente's bestselling game, *Hat Trick*, won several awards including best videogame in both *Replay* and *Play Meter* magazines.

■ Sports games were a common theme for the company with soccer, pool, ice hockey, rally driving, American football, tennis and volleyball all getting some attention.

TIMELINE

1981 ■ Upset at a lack of royalties and recognition, most of Atari's programmers resign and leave.

1982 ■ The company is founded as Videa in Milpitas, California by three former employees of Atari.

1983 ■ Videa is purchased by Nolan Bushnell and the name is changed to Sente Technologies.

1984 ■ Sente is purchased by Bally Midway and becomes known as Bally Sente.

1985 ■ Revolutionary motion control game *Shrike Avenger* is first shown to audiences.

1986 ■ A four-player version of its bestselling game is produced called *Team Hat Trick*.

1987 ■ Sente's only home console game released, an Atari 7800 port of *Hat Trick*.

1988 ■ Bally Sente is shut down and all assets are transferred to Midway in Chicago.

▶ not they would build *Gridlee*. Since their departure from the business resolved that question, ownership of *Gridlee* reverted to Videa and we weren't really sure what to do with it."

Moving away from the troublesome arcade sector Videa decided that the Atari 2600 console also offered an avenue for success and developed two very unique games in *Lasercade* and *Reactor*. Ed was happy with the way its first Atari 2600 projects has started out and was sad to see them fall by the wayside. "Dave Ross and Lee Actor were two of our very talented programmers," he says. "And the programming specs for the 2600 (also known as VCS) were becoming available at that time. We decided that we could develop games both in the coin-op and consumer marketplace and both Dave and Lee were raring to go. I came up with some unique kernel code for Dave's *Reactor* game, and Lee did a brilliant job with *Lasercade*. Both games had a unique look and feel compared to the bulk of the VCS offerings at that time." However this route into the market also failed to work out as planned, as Howard then detailed to us: "We licensed the two games to 20th Century Fox, with a stipulation that if they didn't manufacture a certain number within a certain time frame, the rights would revert back to us. Fox did show the games at a trade show, but I don't believe they ever started manufacturing. As you probably know, the 1983 game crash took its toll on them and others around this time. We got the games back and then licensed them a second time to Parker Bros. That ended pretty quickly and once again the games were ours. We pitched them to Atari, who paid us a small amount just for an option to publish. Sadly, they never actually exercised that option." Programmer Lee Actor remembers that development didn't go exactly as planned either. "*Lasercade* was my first project at Videa," he says. "Dave Ross and I were programming the Atari 2600 games and this involved quite a bit of complicated reverse engineering, which, thankfully, Dave was skilled at. Unlike Activision and Accolade, whose founders had developed VCS games at Atari, Videa's pedigree was strictly coin-op, so we had to figure out the VCS hardware on our own."

Due to the failure of Videa to enter both the arcade and consumer markets successfully, the company needed to seek new avenues of opportunity. Step forward one Nolan Bushnell, cofounder of Atari and former boss to most of the Videa staff. By this time Nolan had left Atari and was looking for a company to supply arcade games to his new business venture – the Chuck E. Cheese pizza and entertainment restaurants. "I saw Videa as a quick way to re-enter the arcade market without breaking my no-compete clause," explains Nolan, before adding, "They already had everything in place, I knew these guys well, they used to work for me. The only demands I made were that we changed the name to Sente, which was something I felt fitted

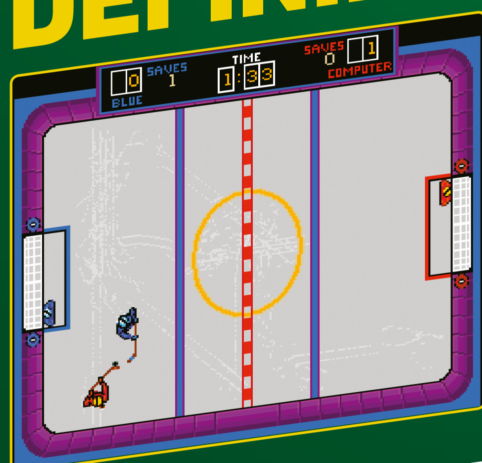


» [Arcade] This simplified version of one of America's favourite sports translates well to a videogame and is more fun than we thought it would be.





DEFINING



HAT TRICK

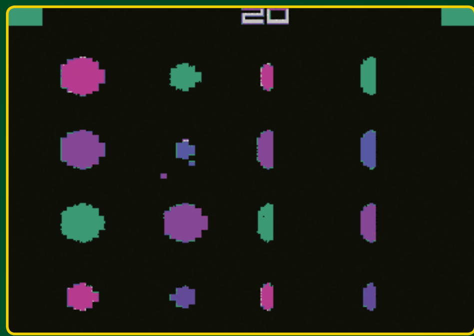
1984

■ Well before *NBA Jam* lit up the arcades with its over-the-top, two-on-two sports-based mayhem, there was *Hat Trick*. The name doesn't automatically give it away: *Hat Trick* is, in fact, an ice hockey game. You control a single player and the goalkeeper, switching when needed, and the idea is to simply score more goals than your opponent within the time limit. The game also records the amount of saves you make as well as points you score, so it rewards a good defence as well as attack. *Hat Trick* was also well known for its clever Zamboni attract sequence.

"Videa's pedigree was strictly coin-op, so we had to figure out the VCS hardware on our own"

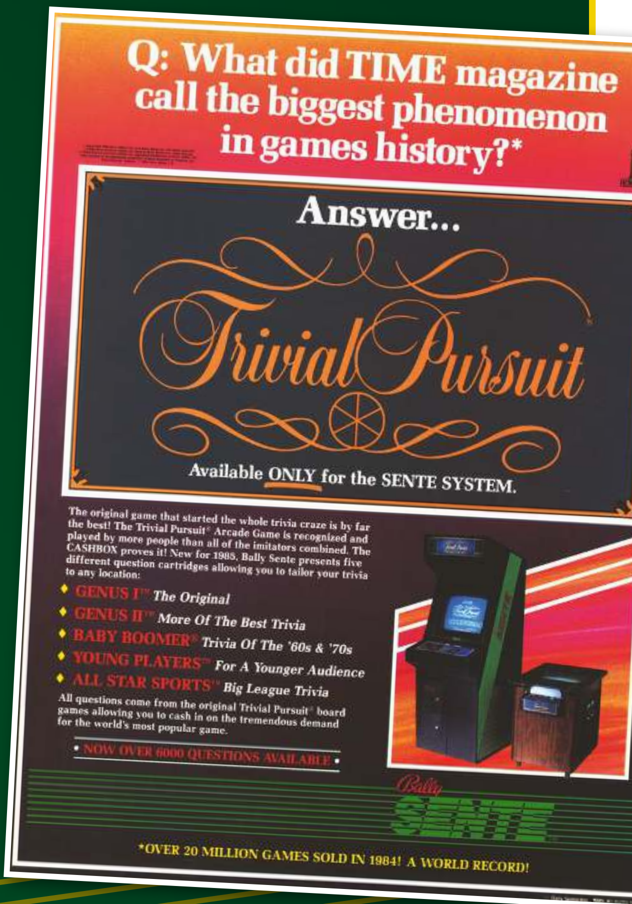
LEE ACTOR

my mantra a bit better." The name Sente actually follows similar origins to Atari as it's also a reference to Nolan's favourite game, *Go*, it means 'having the initiative'. The intent to acquire Videa for $2.2 million was published in January 1983 and the newly named Sente Technologies was officially founded on October 1st 1983. Although Sente did not officially exist until October, Atari sued Bushnell anyway, claiming that his April purchase of the company broke their non-compete agreement. The suit was quickly put aside when Bushnell arranged a licensing deal with Atari, granting them exclusive rights to home releases of Sente's arcade games, which ironically Atari never actually took up. Howard remembers how this deal came about, "Nolan actually first approached us about a year and a half before his non-compete agreement with Warner Communication was due to expire. He asked for a price to develop a single videogame, and we worked up a proposal for him. Then he asked for a proposal to design four videogames, and we gave him that number. He replied that for that amount of money he could buy Videa outright! We negotiated a bit more, and did sell Videa to Pizza Time Theater. The name change from Video to Sente didn't bother me. I was happy, considering the amount of money I was paid, and the



» [Atari 2600] It might not look much from this screenshot but *Meltdown* is a fun and frantic arcade-style game for the Atari 2600.

resources that were now available to us." Cofounder Roger also saw it as a good deal: "Being former Atari employees, we all knew Nolan. He had already left Atari, and when he heard that we were starting up Videa, he offered us an office in his unoccupied incubator building that he owned, which was nearby. It seemed like a pretty good option for us. We had no money and Nolan would let us start there rent-free. I thought the name change was a cool idea."



GAMES



SNAKE PIT

1984

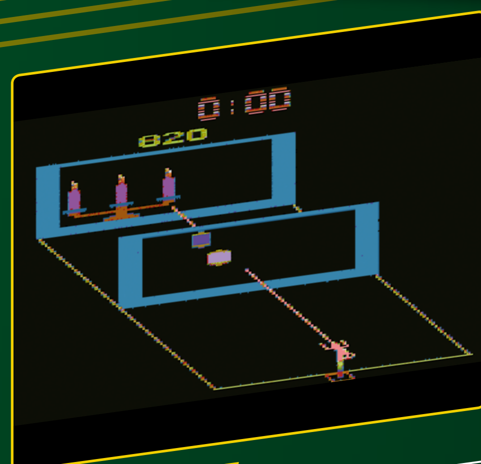
■ One thing that Sente was certainly renowned for was originality, and there is no better example of this than *Snake Pit*, which was also one of the company's earliest games. It can best be described as a combination of *Robotron 2084* and *Indiana Jones* with your character being thrown into a pit of snakes that he must defeat with his trusty whip. Once the screen is cleared, an exit opens and you can make your way to the next room. As the game goes on, other nasty creatures are added, including spiders and scorpions, as well as some lethal traps.



TRIVIAL PURSUIT

1984

■ All in all Sente produced a series of five different iterations of *Trivial Pursuit* to cater for some of the many board game variations produced by Hasbro for the home. There was a *Sports Edition*, *Baby Boomer Edition*, *Genus I*, *Genus II* and a *Young Player's Edition*, too. They all used the same basic hardware with just a variation in the ROM to provide the questions. The game allowed you to select from up to four different characters and played out just like the original board game, only presented in pixels. *Trivial Pursuit* provided a great revenue stream for Sente.



LASERCADE

N/A

■ This was never actually released, despite being 100 per cent complete. This is a real shame as not only is it highly original but it's also really fun to play, too. In essence, it's just a simple shooting gallery game, but it's actually a lot more than that. We have to mention the game's isometric viewpoint. This kind of 3D projection doesn't usually work very well on the 2600, but thanks to the high-res graphics used here it works great. All the targets in the game are protected by shields and that is where the challenge and pinpoint accuracy comes into play.

DNA OF BALLY SENTE



QUIZ MASTERS

■ At a time when the vast majority of arcade companies were focused solely on videogames, Sente saw an opening to branch out into a new market – quiz machines. This was heralded by its acquisition of the *Trivial Pursuit* licence, which turned out to be a very shrewd purchase with no less than five different machines being produced focused on variations of the popular Hasbro board game.

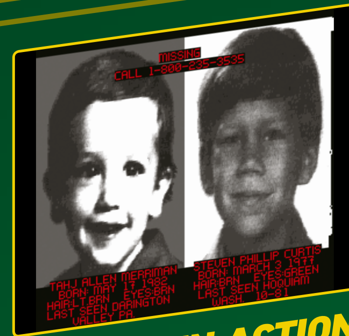
ATARI ALUMNI

■ The list of ex-Atari people who joined Sente is almost endless, from Nolan Bushnell himself to key programmers such as Ed Rotberg, Denis Koble, Owen Rubin and Lee Actor. All of these developers were big names within the videogame world, so to find them all in one place is remarkable. Their biggest success stories might not have been with Sente but they wouldn't be the same people without working there.



TECH TITANS

■ One thing that the Sente engineers knew from their time at Atari was how to create cutting-edge technology. Carrying these skills over into the new company, they created one of the very first interchangeable kits, allowing arcade operators to switch games over with ease. The team also dabbled with motion controls, hydraulic cabinets and even a low-cost unit based on the Commodore Amiga computer.

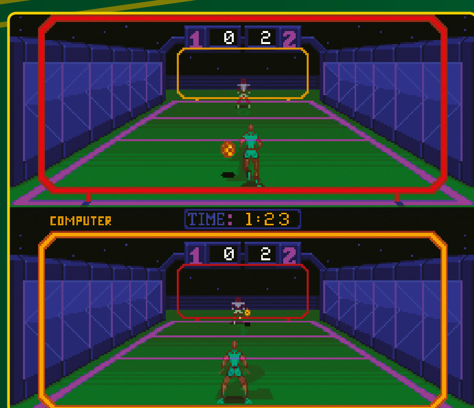


MISSING IN ACTION

■ Perhaps the most bizarre facet of Sente was the adverts for lost children that appeared in many of its arcade games. This came about because Sente found that many local arcades featured posters for missing kids and it was seen as a good way to engage with the local community and create a positive image for the company. It garnered Sente a lot of praise from the press and media alike.

RIDE ON TIME

One of the more interesting tales to come out of Sente was its development of theme park rides and Howard was happy to give us the full story. "Bally also owned the Six Flag amusement parks, so, surreptitiously, we came up with a concept for them. It was an indoor dark ride, similar to Disney's Haunted Mansion, but with the ability to shoot the ghosts and other monsters. Players would get a score, which gave the opportunity for promotions, high score boards, etc.. We could even have had tie-ins to an actual videogame. Roger did an entire 3D cardboard scale mock-up and we demoed it to Six Flags, and they loved it. But when we asked Bally for the $5 dollars it would have taken to build it, they said no. That was very disappointing, but it was a fun project to be involved with. Ironically, the exact same concept appeared at the Santa Cruz Beach Boardwalk years later.



» [Arcade] Sente's *Goalie Ghost* can best be described as 'football meets *Pong* in 3D', and it is great fun with a second player.

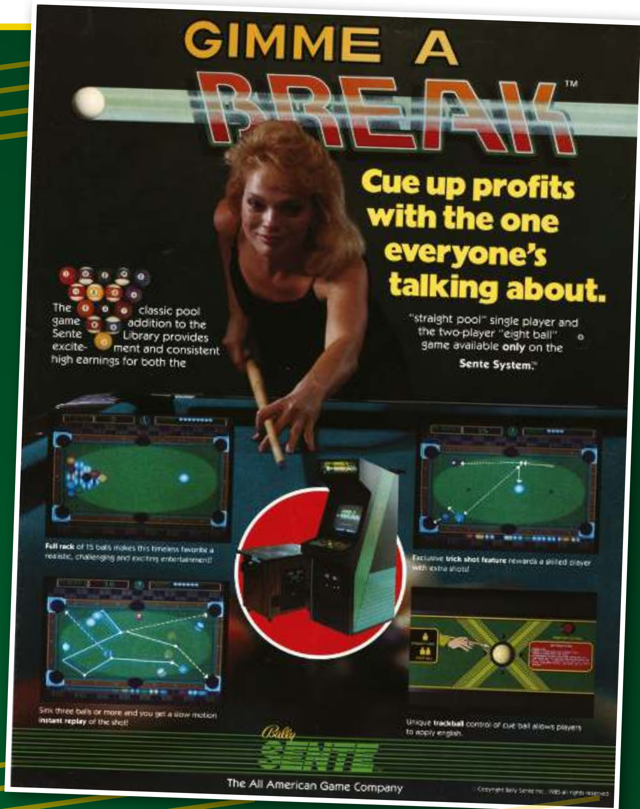
▶ The next move for the newly-named Sente Technologies was to come up with an arcade system that was versatile and easy to adapt to different games, something that suited Nolan's business model. Step forward Roger with a new concept. "I had a lot of experience with coin-op cabinets, and had created a convertible game system at Atari called the Multi Module," he explains. "Nolan loved this concept and was a big advocate of making the SAC-1 an upscale convertible system with a metal cabinet and easily-swapped game cartridges, controls, and graphics. This way a game operator could refresh games on location with minimal effort and expense. Nolan laid out these goals to us and Sente created something that was unique. It was more than a game, it was a new business model. Nolan introduced it at a big private event for the distributors as a part of his 're-entry' into the games business under Pizza Time. We had a bunch of games and a new factory ready to build it all. The SAC-2 was basically the SAC-1 hardware powering a game (*Shrike Avenger*) in an elaborate motion simulator cockpit. It was an amazing space shooting game in a moving cockpit tied to the steering action. But teens took great pride in destroying something like this in an arcade and it was hard to keep running in the field, so only a handful were built." Sente's system was more than just a universal cabinet, though, and it incorporated some revolutionary hardware. Howard explains more, "We came up with eight games that we wanted to launch with and we hired a sound designer to begin creating sounds for them. He then brought up the idea of using the new digital synthesizer technology, rather than the sound chips that were commercially available at the time and introduced us to the CEO of Sequential Circuits, one of the many new digital keyboard companies that were popping up in the early Eighties. Eventually, we licensed their proprietary chips and circuitry, which became the sound board in the SAC-I cabinet. Nobody else had anything like that at the time."

After less than six months Sente was in trouble again as its parent company, Pizza Time Theatre Inc., filed for bankruptcy. In a swift chain of events a saviour was found once more. "Unfortunately, Pizza Time had hit the financial skids," Howard laments."They suddenly realised that spending exceeded income and Nolan decided to sell the Sente division, and all its games, to Bally Midway. This all happened quickly, and Nolan flew to Bally's headquarters in Chicago to cut the deal. The Bally CEO liked the idea, acquired Sente and made it a separate division from Bally Midway. But the Bally Midway execs were competitors and were not too excited to see Sente come in as a new division that would remain a competitor. Worse yet, it was decided that the Midway factory would build our Sente games (we had to close our own factory) and this meant that our competitor would build our games. This didn't work



PIZZA TIME

■ Today it probably seems quite strange that somebody would buy an arcade company just to supply games for a pizza restaurant, but that's exactly what happened when Nolan Bushnell purchased Videa and turned it into Sente Technologies. The company actually became a division of Nolan's Pizza Time Theatres company, but this only lasted five months before bankruptcy reared its unwelcome head.



"IT WAS AN AMAZING TIME OF UPS AND DOWNS IN THE BUSINESS"

Howard Delman

out very well and Sente suddenly had problems with 'build quality' and 'slow delivery'. This was not a recipe for success, as you can imagine, but there was little we could do about it." Fortunately for Sente, though, becoming part of America's biggest arcade game manufacturer solved its cash crisis and allowed the team to explore new avenues. One deal that worked out really well for Bally Sente was acquiring the *Trivial Pursuit* licence, Ed recalls how this happened, "Our president at the time, Bob Lundquist, was looking for interesting IPs and it fitted the bill. I also remember that *Name That Tune* followed on the heels of *Trivial Pursuit*."

Bally Sente trundled along for several more years releasing lots of games without ever managing to achieve the mass market success. The three cofounders felt hampered by their owners and each decided it was time to move on with Bally Midway closing the division shortly afterwards. The experience was bittersweet for Howard. "I left Sente in May of 1987, when my contract was up," he remembers. "I had not been allowed to develop anything significant and original after the SAC-I, and the meshing of Sente with Bally Midway left me feeling like an unwanted orphan. I was happy to go, but at the same time, disappointed at how the entire experience had unfolded." Howard was a bit more upbeat about his life at Sente: "It was an amazing time of ups and downs in the business, and we managed to create original entertainment and cool tech the whole time because we stayed focused on doing what we loved, we laughed and played together daily, we worked until we dropped, and we respected the talent around us. Even though several projects ended in frustration, we were able to find and hire amazing people, never copied others' work and built cutting-edge entertainment. I think Sente has much to be proud of." Owen was the last man standing at Sente, "I was called by Bally and told that they were closing it all down and was asked to stay and help 'turn off the lights'," he recalls. "I was also responsible for selling off a lot of the equipment. The arcade game industry was going through its second downturn, and Bally wanted to move all game design back to Chicago." We leave the final thoughts to Ed: "Videa/Sente was probably 'a bit too late to the dance', as it were, to have had any major impact on the industry as a whole. While we tried to do a number of innovative things, which were, like the company itself, on a smaller scale than many of the bigger developers. Perhaps any legacy is best discussed in terms of what the creative people at Sente went on to do afterwards. And I think that tells its own story!" ✱

Many thanks to our interviewees.



» [Arcade] There have been quite a lot of arcade pool games over the years, Sente's *Gimme A Break* is one of the better ones out there.

WHERE ARE THEY NOW?



HOWARD DELMAN

■ Howard is now a consultant, specialising in the design of hardware and software. In this role he has developed a number of successful products for the arcade, toy and consumer electronics industries. He has been running Delman Design since the day he decided to leave Sente. His clients have included Midway, Apple, Time Warner, Capcom and Bandai Namco.



OWEN RUBIN

■ Currently working at Edison Labs, a technical consulting group, Owen was the VP of Customer Experience for castAR, a startup making AR headsets for tabletop gaming. Before that, he was the lead game designer and CTO for Innovative Leisure Inc., a company made up of early pioneers of the videogame industry with a focus on mobile games.



ED ROTBERG

■. After leaving Sente, Ed went back to Atari for five years – helping to develop games such as *Hard Drivin'*, *Steel Talons* and *Rampart*. After this, he took up a number of roles including senior software engineer at Apple, project director at 3DO, staff engineer at THQ and consultant at Nokia.



LEE ACTOR

■ Although he is now retired, Lee is very much still involved in using computers to make music, exactly where he started in the industry nearly 40 years ago. After Sente, Lee worked for several years at Atari Games before starting Polygames with another ex-Atari and Sente employee, Dennis Koble.



ROGER HECTOR

■ Roger is a serial entrepreneur who has produced and launched over 100 different consumer products and well-known interactive game franchises. These have been responsible for over $2 billion in revenue for such corporations as Disney, Sega, EA, Universal Studios, Bandai Namco, Bally Midway and Atari. These days he is CEO at Top Track creating mobile music apps.



NOLAN BUSHNELL

■ One of the figureheads of the games industry, there probably isn't anything we can tell you about Nolan that you don't already know. His latest ventures include BrainRush, a company that creates educational software, and, in January 2017, Bushnell joined the board of directors of Perrone Robotics, a maker of robotics software platforms for autonomous vehicles and mobile robots.



Steel Battalion Controller Fact

■ There are two versions of Capcom's controller. The original game features green buttons, while the *Line Of Contact* version sports blue ones.

Steel Battalion Controller

» PLATFORM: XBOX
» RELEASED: 2002
» COST: £129.99 (LAUNCH), £150+ (TODAY)

We wonder when the alarm bells started ringing at Capcom's HQ after *Steel Battalion* was pitched? Was it when producer, Atsushi Inaba, explained he wanted to create a "product-focused project", or when his team decided to move development over from the stupidly successful PS2 to the more powerful, but less popular, Xbox? Perhaps it was when he revealed that the controller would be gigantic and would feature around 40 buttons. Oh, and it was to retail for £130? We're not sure when those alarm bells started ringing, but we are glad that Capcom's gargantuan peripheral actually exists.

No mech game is as immersive as *Steel Battalion* is (or *Tekki* as it's known in Japan). While it's not going to appeal to all fans of the genre (it's a little too simulation-heavy for our tastes), it's arguably the one that makes you most feel like you're stomping around in a gigantic vertical tank. Simply starting up your VT requires several buttons and switches to be flicked and pressed, and things only get more complicated once you get the damned thing moving. And let's not mention the horror that sets in when you realise you've lost your entire progress because you were unable to reach the eject button in time (cowards play it with the plastic covering flipped up).

After 15 years of pondering we still can't decide whether the release of *Steel Battalion* is one of the ballsiest, cleverest or stupidest decisions that Capcom has ever made. What we do know is that there's nothing quite like it in the industry, and it's highly likely that there will never be anything like it again. *



ESSENTIAL GAME Steel Battalion

Although two *Steel Battalion* games were released in support of the peripheral, the sequel, *Line Of Contact* is virtually unplayable today as it was predominantly online-based. Fortunately, the original is still worth playing and it remains one of the most unique experiences you can have on Microsoft's console. It's far more simulation based than the likes of *MechAssault* and *Metal Wolf Chaos*, so turning at too fast a speed will cause your VT to helplessly topple over. Stick with it, though, and you'll discover a rare gem that offers you what you put into it.

ALIEN

The B-movie invasion of Earth has begun and we must all choose a side: Military or Triclops? Mitch Wallace trades tank shells and plasma blasts with the extraterrestrials who beamed interplanetary, online warfare into arcades and onto the Sega Dreamcast



IN THE KNOW

- » **PUBLISHER:** SEGA
- » **DEVELOPER:** WOW ENTERTAINMENT
- » **RELEASED:** 2001
- » **PLATFORM:** ARCADE (ALIEN FRONT) DREAMCAST (ONLINE)
- » **PLATFORM:** ACTION

Ah, the modern communication convenience of Xbox Live and PlayStation Network. Lovely, isn't it? But let's be honest: we can take for granted the crystal-clear voice chat these services provide, and it's easy to forget that keyboards were required for online trash talking. Is it any surprise that Sega's Dreamcast was at the forefront of technology that is now a network gaming staple? Way back in 2001, *Alien Front Online* was facilitating real-time audio correspondence between players over the internet via dial-up modem, and for the first time on console, no less. But the 56K road to this quiet revolution began in the arcades of yore.

Art director Gerardo 'Enzo' Sprigg, who began his career contributing to SNES games, like *Tom & Jerry*, *Bobby's World* and *The Hunt For Red October*, was working at Acclaim's struggling coin-op division on an ill-fated, licensed *Magic: The Gathering* arcade title when Service Games came knocking.



» [Dreamcast] It goes without saying that tanks and monuments don't make for good bedfellows.

"At one point before our studio closed," Enzo begins, "some people from Sega [visited] and looked at our projects. I guess they wanted to see if they could maybe buy one of the arcade projects or recruit some people. We didn't know what was going on, so we were collecting our stuff and getting our things ready to move on." Several months passed before Enzo received an email from Makoto Uchida, a senior level Sega designer responsible for hits like *Altered Beast*, *Golden Axe* and perhaps most recently at the time, *Die Hard Arcade*.

"Basically, he had a small group of guys, Japanese developers that were living in the US and working at Sega Of America," Enzo explains. "His boss had mandated him to find some Americans to work with, and their basic idea was if they could find some American counterparts to work on games with them, the titles would feel more American."

Enzo and Uchida hit it off, and after a meet-up, it was decided that the old Acclaim art team would reunite and join Uchida in a Sega Of Japan satellite office in the US (Wow Entertainment, to be precise). The goal? To begin work on a new project, one that would, not unlike *Crazy Taxi*, appeal to American audiences. Uchida, it turns out, had something in mind. "He was a big fan of Namco's *Tokyo Wars*," Enzo says, "and it was doing well in the arcades. He wanted to do a vehicle game because he noticed that people loved [cabinets] with steering wheels and pedals. They would look at them and go, 'Oh, I know how to play that, it probably drives like a car.'" Additionally, and in general contrast to the static stages of *Tokyo Wars*, Uchida was adamant about implementing destructible environments.

As such, work began on a 'future-tank' title, and the team tried its best to convey it with genuine

FRONT ONLINE

DEVELOPER HIGHLIGHTS



SEGA MARINE FISHING (pictured)
SYSTEM: DREAMCAST
YEAR: 2000

WILD RIDERS
SYSTEM: ARCADE
YEAR: 2001

THE HOUSE OF THE DEAD III
SYSTEM: ARCADE
YEAR: 2002



» [Dreamcast] The visuals in *Alien Front Online* actually still hold up relatively well. Bright, clean and simple.

American flavour. But the project appeared to be deriving a little too much theming from its inspiration. "One of our superiors came from Japan to see our game," Enzo says. "He looked at it and was like, 'Well, it's looking good, but it's just *Tokyo Wars*. What's different about it? What's interesting?' It was kind of a 'Eureka!' moment for Uchida. He got us all together and said we needed something unique. Usually with Japanese developers, a guy like Uchida would figure it out himself, but he really wanted our group to function more like an American team, so he was looking to all of us [for input]."

Enzo admits that he doesn't remember exactly who came up with the golden idea, but someone suggested a premise of the US military fighting off an alien invasion. Apparently, the Americans on the team immediately liked the notion, but the Japanese members were somewhat sceptical. When asked why, their response was honest: 'Who would want to play as the aliens?' An impromptu hand-raising poll showed a divided team. "Then I said, very passionately," Enzo continues, "'I probably would never play as the military, not if you're giving me weird vehicles and cool, interesting technology that I haven't seen before.' Though as we developed the game more, the tanks felt really cool and I would switch sides all the time, which I think was a testament to the [good work]. We hit upon something there, that duality where you could choose your side."

Now that a unique game structure had materialised, an entire alien race had to be



» [Dreamcast]The SP Walker is the slowest vehicle in the game but also the most powerful.

SHOUT ABOUT IT

More games that used the Dreamcast's microphone



MR. DRILLER

■ The award for 'Most Unexpected Use of the Dreamcast Microphone' must go to Namco's 1999 saccharine-sweet arcade puzzler. Tired of using the stock Dreamcast controller to order *Mr. Driller* around? Plug in the mic, and suddenly every yell, clap, whistle or tap will initiate hands-free drilling. Don't even try explaining it to your neighbours.

SEAMAN



■ Yoot Saito's delightfully disturbing virtual pet simulator utilised the audio peripheral for advanced voice recognition, enabling players to hold entire conversations with a tank full of wisecracking digital life forms. Honestly, what other game dares to ask if you've been cheating on your wife? The answer: There isn't one.

PLANET RING



■ Released only in Europe and given away for free in some instances, this online-only collection of four minigames supported up to 32 simultaneous players. Like *Alien Front Online*, it utilised the microphone for real-time voice chat. Using the add-on, gamers could even guide one another through mazes. Homebrew servers brought it back online in June of 2013.

PROPELLER ARENA



■ Outright cancelled after the events of 9/11, this promising arcade dogfighter was finished and ready to be released when Sega pulled the plug. With a punk rock soundtrack and six-player online connectivity, it would have utilised the same real-time voice chat technology that Alien *Front Online* shipped with. Luckily, leaked copies do exist.

created. "We wanted something like a *Mars Attacks* kind of feel," says Enzo. "Something playful, not overly HR Giger—a conscious being." And so the Triclops were born, along with their pulsing fleet of organic hoverships, bipedal walkers and four-legged war machines. The military options were naturally more straightforward, consisting entirely of traditional, camouflaged tanks. Regardless of what side a player gravitated toward, picking the right vehicle was tantamount, because each choice had its own strengths and weaknesses. Four-on-four battles were fought inside tight arenas, such as Washington DC, Ancient Ruins, and Tokyo Japan.

Once a functional demo build was up and running and a temporary cabinet had solidified, it was time to take the game public. While *Alien Front* proper would end up being a Japan-exclusive release (due to the declining US arcade market), initial arcade testing took place in several California locations, such as Sunnyvale Golfland, Pier 39 in San Francisco and Malibu Castle Golf And Games in Redwood City. Interestingly, and according to lead programmer Kevin Klemmick, Sega thought the game's lack of recognisable characters would prevent any kind of real success.



» [Dreamcast] Lots of legs, lots of destruction. Your basic extraterrestrial spider.

> "Sega didn't really support us – they had this huge booth and threw us in the furthest corner"
> Kevin Klemmick

We brought it down to E3 one year and set up two or three cabinets," he says. "But Sega didn't really support us – they had this huge booth and threw us in the furthest corner. We had the worst spot. But it created a problem, because people were lining up to play and were so interested in the game that it was crowding up the booth and blocking access to other games! It was another sign that the game was fairly popular and that Sega didn't understand why." Possible internal politics or misunderstandings aside: the game was testing well. "*Alien Front* was always appealing," Enzo adds. "In fact, when we released, we were in arcades going toe-to-toe with the *Star Wars* Podracer game, and we were [earning more than] them. We were shocked!"

Why was it so appealing? Perhaps it had to do with robust multiplayer capabilities. "You could have eight cabinets set up with an optical link between them, or dial in with a modem," Kevin explains. "I think it was the only cabinet that you could plug into a phone line and fight against people in other arcades." Kevin says that the earliest incarnations of the cabinet even had support for voice chat, but people were too rough with the headsets, which tended to break from misuse.

Given the success of the cabinet, it was only a matter of time before a home port was planned. "We had finished the arcade game when Uchida

ONLINE WITH SEGA

The best Dreamcast games you could play online



CHUCHU ROCKET!

■ *Sega Swirl* aside, Sonic Team's frantic action puzzler was the Dreamcast's very first online multiplayer title. Gameplay involved placing arrowed tiles around a game board to lead mice away from space cats and into getaway rockets. Internet play was a blast, and the ever-present 56K lag was glorious. Also, as of June 2016, it's back online!



SPEED DEVILS ONLINE

■ Mostly a retooled, internet-enabled version of the 1999 Dreamcast launch title, this Ubisoft arcade racer featured cool cars, five player races and outrageous tracks filled with dinosaurs, tornados and UFOs. Of note was a high-stakes vendetta mode which allowed winners to acquire losers' cars. One can imagine the copious ragequits.



» [Dreamcast] A Dreamcast advertisement inside of a Dreamcast game. So meta.



» [Dreamcast] While the arcade *Alien Front* was multiplayer-only, the Dreamcast port added single-player missions.

came to us [about] a Dreamcast version," Enzo says, "and he knew what he wanted to do: a single-player campaign on both sides telling two stories, one about invading and one about defending." New levels were added, and consideration was even given to online connectivity between arcade and Dreamcast players. Given the fact that the cabinet never released outside of Japan, that feature was scrapped. "Uchida was one of those guys that always had ideas," Enzo adds. "He was always trying to figure out a way to make his game special."

That extra something would end up being the Seaman microphone – the audio peripheral would be co-opted and modified for use with the first voice chat system for consoles. During online battles, players could hold the 'Y' button and record a five-second clip to send to teammates, or double-tap it to broadcast trash talk to everyone. A forward-thinking proposition for the time, and it all worked well, especially taking into account the game's lack of support for the Dreamcast broadband adapter. "Honestly, that wasn't as much of a problem as you might think," Kevin admits. "I had come off a project called *Falcon 4.0*, which was a flight simulator. It was multiplayer and I'd done all the network code on that. You were flying around in a warzone with literally thousands of tanks and troops and supply convoys and planes, and we did all that over 56K. I used a lot of the same technology for *Alien Front*."

At this point, the team was assuming that a decent amount of microphones existed in the Dreamcast community, so they planned on selling a version of the game both with and without the peripheral. But since Seaman ended up selling poorly, every copy of *Alien Front Online* came packaged with its own mic. Fortuitously, *AFO* wasn't the only Dreamcast title that was scheduled to utilise voice chat technology.

"We had a sister team in Japan who were part of Wow Entertainment and were working on a game called *Propeller Arena*," reveals Enzo. "They were ahead of us. So Uchida had graciously said, 'Oh, well you guys should do the voice chat that we're doing because it makes the game better.' I would say a couple months before they were slated to come out, Uchida told us they were going to release first and that they were going to have the voice chat. I was devastated! But then 9/11 happened and they were indefinitely shelved."

Over six months after Sega announced that it would stop manufacturing the Dreamcast, *Alien Front Online* invaded US store shelves – other regions would unfortunately never see the port. Despite an active multiplayer community, the unlucky market timing took its toll, and the servers wouldn't even stay up a full year before being taken offline in June 2002. Miraculously, though, the game was brought back online on 6 November 2016, allowing gamers to relive this pioneering title the way the original team intended– fully networked and with functioning voice chat.

"It was a interesting time to be at Sega," Enzo closes. "Being a part of this little half-Japanese, half-American team was neat, and I have really fond memories, because it was very much a ragtag group of guys pouring a lot of love into [a game] and not having a lot of resources." *

Thanks to Enzo and Kevin for sharing their stories!



PHANTASY STAR ONLINE

■ It's impossible to speak about the Dreamcast and not mention Sonic Team's MMO-esque RPG juggernaut. For many, it was a proper introduction to the genre, and for others it was training-wheels exposure to console network multiplayer. Unsurprisingly, there remains an active community to this day, still tending to MAGs on private servers.



OUTTRIGGER

■ Up to six players could compete online in AM2's fast-paced arcade shooter. In a PC-friendly move, the game allowed users to plug in the official mouse and keyboard for superior control. Dial-up was still the main method of connectivity, but surprisingly, support was also included for the often-ignored broadband adapter.



BOMBERMAN ONLINE

■ Over a decade before *Super Bomberman R* brought worldwide blasting to the Nintendo Switch, there was this cel-shaded, late Dreamcast release. A North American exclusive, it's notable for being one of the few *Bomberman* games playable over the internet. Interestingly, it also required a paid SegaNet account to partake in online multiplayer.

CLASSIC MOMENTS

Football Glory

» **PLATFORM:** AMIGA » **DEVELOPER:** CROTEAM » **RELEASED:** 1994

S*ensible Soccer* cast a large shadow over most other Amiga football games - every other effort on the system was judged against it, no matter what. Croteam's *Football Glory* quite nakedly took inspiration from *Sensi*, but it tried to stand out through its own moments, ranging from the spectacular to the silly. While most matches end up being comical and highly-entertaining goalfests, *Football Glory* lacked *Sensi*'s distinct flow, making it very easy to accidentally scissor an opponent with a tackle and then get sent off by the typically harsh referee.

Understandably annoyed, your player would then chase the referee around a bit – living out the dream of every British football hardman. Chances are that most people had at least one player sent off every match, but at least they were able to channel their inner Vinnie Jones… and who knows? Maybe this time they'd be able to actually catch the man in black and tell him what's what. *

BIO

Football Glory is a game with a rather considerable debt to *Sensible Soccer*. Some would almost say that it's a rip-off. However, there were enough differences and quirks in the game to make it stand out somewhat, and it sold very well – at least, until *Sensible Software* threatened Croteam with legal action. While it successfully defended the game, *Football Glory* never recovered from the time it spent off the store shelves, and it was classed as freeware in 1998. Croteam would later make its name with hits such as the *Serious Sam* series and *The Talos Principle*.





MORE CLASSIC FOOTBALL GLORY MOMENTS

Curling One Out



Football Glory's extra moves are legendary – bicycle kicks, volleys and riding the tackle were all things that weren't in *Sensi*, and they usually resulted in amazing goals. Not to mention the ridiculous aftertouch – this game's ball physics are bendier than an unrestricted banana. If you were a keeper in *Football Glory*, then god help you.

It's A Sizzler



Upon scoring a particularly good goal, you're often greeted with a sampled voice shouting, "Magnificent goal!" during the replay. This might not be seen as hugely special, but it does a least bring a smile to the face… even when you've just walked the ball into an open goal following the poor keeper's latest mishap.

Gaffetastic



The goalies in *Football Glory* really don't help themselves, and sometimes communication between them and the outfield totally breaks down, and they stick the ball into their own net. This tends to happen more to the computer than to you, therefore it's often funny and is even acknowledged with a little thank you note from your players.

People On The Pitch



Then there's the fabled streaker. Sometimes, for no reason, your match will be interrupted by someone baring their all for the world to see, with coppers valiantly giving chase. Such occurrences are rare indeed, happening once in a blue moon, but they're most certainly out there. *Football Glory* is a somewhat strange game, after all.



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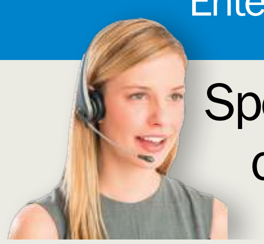
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In the chair with...

NOBUO UEMATSU

We sat down with gaming's most celebrated and successful composer to discuss over three decades of his career, from helping establish some of the biggest RPGs in the world to his flirtation with the mainstream and his colourful, progressive-rock-flavoured inspiration

An acclaimed composer, Nobuo Uematsu has enjoyed a career spanning over three decades. His music is known for its rousing soundscapes, progressive sensibilities and emotional hooks. But despite his success, Uematsu remains humble – a self-taught musician, his love for music has always comes first and has lead to him forming his own studio and record label. From *Final Fantasy* to *Chrono Trigger*, without Uematsu it's safe to say RPGs wouldn't have taken the shape they do today. Uematsu has been instrumental in shaping the industry and is still influencing mainstream opinion of the relationship between games and music to this day.

Nobuo Uematsu didn't want to be a composer for videogames. You can tell from his smorgasbord of influences that the world's most popular videogame composer grew up with other intentions. Born in Japan, Uematsu educated himself with Elton John records, learning music by ear on his sister's piano and his grandparents' guitar, before developing a taste for British progressive rock by the time he graduated Kanagawa University with a degree in English.

"My plan was to become a more conventional composer," Uematsu told us when we asked about how he ended up working with Squaresoft back in 1987 on a little game called *Final Fantasy*. "But the trouble was that I couldn't find work anywhere outside the gaming industry! That's how it goes, I guess."

Uematsu dreamed of writing music for European films, creating scores that elicited emotion from the viewer, that galvanised that romantic lining that defined European cinema in the late Sixties and early Seventies. A chance meeting with Square developer Hironobu Sakaguchi in Tokyo lead Uematsu to composition for games, simply because it was the path of least resistance into music composition of any kind.

35 years later, Uematsu is still working with Square, and on the *Final Fantasy* brand, too (albeit as a freelancer): his most recent work was composing the main theme for the upcoming *Final Fantasy XIV* expansion, *Stormblood*. It's a legacy that's lasted 35 years, with humble MIDI beginnings on the very first *Final Fantasy* game Square developed back in 1987.

"I was extremely surprised [by *Final Fantasy*'s success]", Uematsu reveals. "Up until that point, Square hadn't really had any hits, so seeing the game do so well was something I hadn't expected at all!" It wasn't just Uematsu that was caught out by the game's success; the peculiar naming convention of the series came from Square's assumption that the RPG would be its last ever game, so the studio went all in on what it assumed would be their eponymous

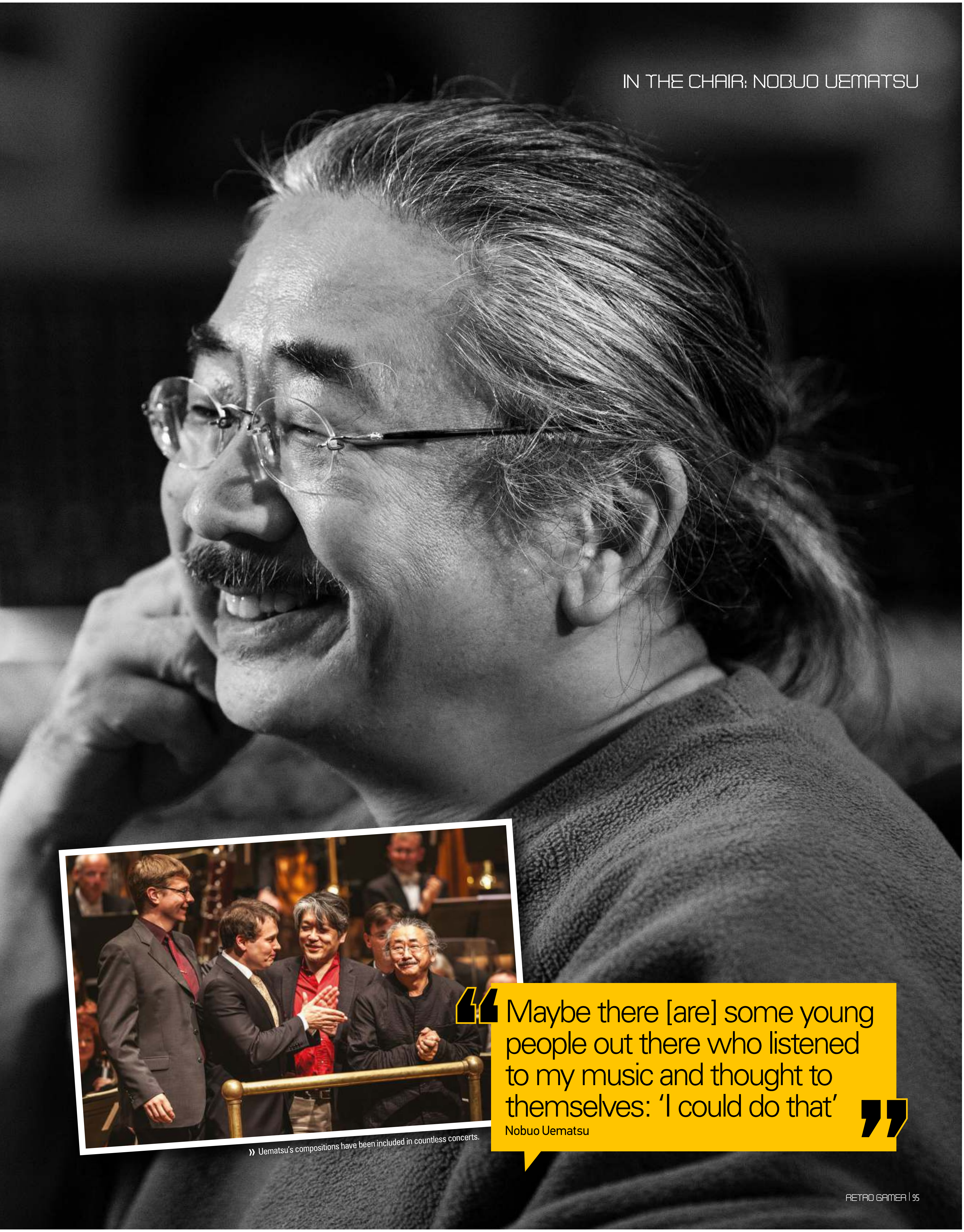


» [Famicom] Despite being a bit of a black sheep in the series, *Final Fantasy II* featured an amazing soundtrack, courtesy of Uematsu.

final fantasy. Before this, Uematsu had composed for games like *Genesis* and *Alpha*, neither of which enjoyed much success at home or abroad. Things looked grim for Square, and Uematsu kept his part-time job at a music rental shop in Tokyo, just in case things didn't work out.

As it happens, Square's gambit paid off. Sales were strong in Japan, and the series took off – its mix of intelligent world design, inventive characters and rousing music were repeatedly cited as reasons for the game's success. These are elements that would come to define the series as a whole, and Uematsu fit director Hironobu Sakaguchi's vision for the series perfectly – after all, the mix of pop and prog inspirations in Uematsu's formative years ran perfectly parallel with what Sakaguchi wanted *Final Fantasy* to be: at once familiar and ground-breaking.

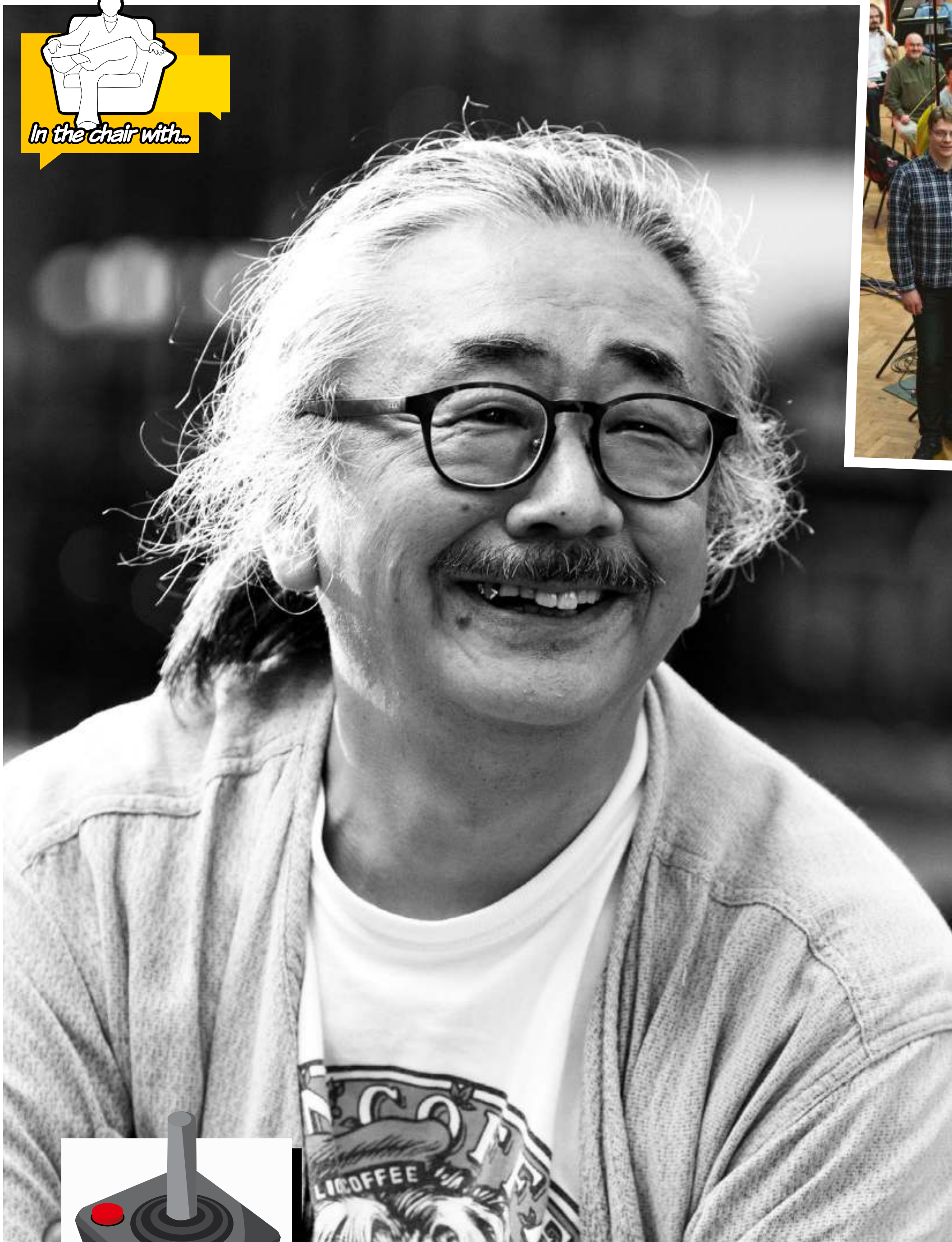
"Fantasy-based RPGs are the easiest genre to compose music for, if you ask me," Uematsu told us as we asked him to pick out what made RPGs appeal to him the most. "If you look at more action-oriented genres like shooting games for example, the genre itself will often dictate what you can and cannot do. They require a score that's fast, intense and upbeat.



» Uematsu's compositions have been included in countless concerts.

> "Maybe there [are] some young people out there who listened to my music and thought to themselves: 'I could do that'"
>
> Nobuo Uematsu

In the chair with...





» *Final Fantasy* music is played live worldwide in concerts such as *Distant Worlds* and *Final Symphony* – frequently with Uematsu in attendance.

RPGs, on the other hand, often contain scenes that work better with a more melodious score. But RPGs also allow me to write battle themes where I can change the rhythm and the key freely, which is something I like to do quite a bit. Having that variety, the freedom to write these different types of music, is something I feel very comfortable with. It's the easiest way to work for me."

But *Final Fantasy* isn't just any old RPG series – there's a specific tone and mood to each game, from the hopeful message of the first title and its story of Warriors Of Light holding back an ancient evil, to the doomed, pessimistic outlook of *Final Fantasy V* and its narrative dirge towards death. Each game in the series has a personality that – in no small part – is realised by its score.

"[Composing for] a *Final Fantasy* game, the process is mostly the same every time a new one comes along. Before I go to work, I need to understand the general mood of the game. So I'll usually start reading the script to find out more about the background of the game and what kind of characters it features. Grasping the overall mood is key, really."

Many mainline games and a myriad of spinoffs later, and Uematsu's arpeggio motifs and delicate melodies are still used by other composers in tribute to the series' legacy. Just one refrain from the theme of the original game is enough to elicit gooseflesh in players

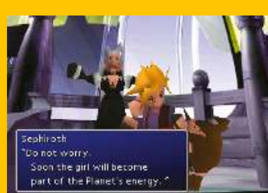
TOP FIVE

Essential listening from the musical maestro



LIBERI FATALI
(FINAL FANTASY VIII, 1999)

■ The opening track to *Final Fantasy VIII* had vocal elements that mixed Latin phrases with a language of anagrams to create a brooding and Gothic track that sets the tone of *FFVIII* within its opening bars. *Liberi Fatali* was even used by the USA's 2004 synchronised swimming team to support its routine.



ONE-WINGED ANGEL
(FINAL FANTASY VI, 1994)

■ *One-Winged Angel* was the first *Final Fantasy* track to have lyrics (in Latin), and Uematsu has cited the theme to Alfred Hitchcock's *Psycho* as an inspiration for the piece. Uematsu wanted *One-Winged Angel* to sound like a Sixties or Seventies rock track, performed by a full orchestra – a goal he certainly achieved.



DANCING MAD
(FINAL FANTASY VI, 1994)

■ This is the showstopper of *Final Fantasy VI* – a lengthy beast that moves from Baroque to Fugal, somehow mixes the musical motifs of a circus, a funeral and a prog-rock headline closer into one 14-minute piece. It's potentially the most ambitious, sprawling piece of games music ever written for a 16-bit system.



TO ZANARKAND
(FINAL FANTASY X, 2001)

■ One of the pieces that Uematsu is personally most proud of, *To Zanarkand* encompasses every all of *Final Fantasy X*'s themes: loss, uncertainty and beauty. The lone piano at the start of the track and the gradual, delicate build of the supporting orchestration almost always is performed live at Uematsu's concerts.



BATTLE AT THE BIG BRIDGE
(FINAL FANTASY V, 1992)

■ A song that has reappeared again and again in *Final Fantasy*, this was originally written for the Gilgamesh boss fight in *Final Fantasy V*. Thanks to Gilgamesh's repeated appearances in the franchise, the song has been the subject of multiple remixes and reorchestrations.



> "To Zanarkand was one of those rare pieces that I felt came out just right. I think I did a good job on that"
> Nobuo Uematsu



» [PlayStation] *Final Fantasy VII*'s iconic *One-Winged Angel* theme is in part inspired by Jimi Hendrix's *Purple Haze*.

that know *Final Fantasy* as a series – as an experience – and that's a fact that isn't lost on Uematsu.

"It's a great honour [to hear my motifs used today]. It always makes me very happy. It's been quite a while now since I stopped working [on the *Final Fantasy* series], so I feel extremely honoured that these melodies are still being used."

Uematsu saw Square through arguably the most exciting period in RPG history: as the series' style evolved, so too did his own. *Final Fantasy* morphed from 16-bit to 32-bit, giving Uematsu even more space to play with the music, give even more characters their own themes, create even more sprawling and evocative OSTs. More of his rock-based musical education came to the fore in his battle tracks, more of his appreciation for European classical music showed itself in his character themes, and more of the love of progressive rock appeared in his work – melding melody and mathematics, emotion and musical theory.

The pinnacle of this evolution of both game and music was 2001's *Final Fantasy X* – the first game in the series to feature voice acting, stereo sound and move to a true 3D engine. Uematsu, by all accounts, was moved by the game's scenario and the result was a score that was a significant departure from anything else he'd done for the series. He composed his first solo piano track for the game, created a modal hymn rooted in Okinawan tropes (with huge narrative implications) and – due to constant late nights and tight deadlines – resorted to hiring composition assistants for the first time in the series' history.

Ever a perfectionist, the result was at least something Uematsu could be proud of – in his own eyes, a lot of *Final Fantasy*'s music comes across as 'samey', a lot of the tracks don't resound with him. "It's up to each listener to find out whether my music is special to them and why. I always feel that my compositions are all too similar. There are a lot of pieces that I personally don't like very much."



» [SNES] *Final Fantasy VI* features some of the series' most iconic compositions, from *Terra's Theme* to *Dancing Mad*.

This changed with *Final Fantasy X*, however. Despite the tight deadlines and the various changes in how Square had begun to manufacture and produce videogames, the resulting OST to the game is something that would forever mean a great deal to Uematsu, and there was one track in particular that has stuck with him to this day.

"*To Zanarkand* was one of those rare pieces that I felt came out just right. I think I did a good job on that one. The way it develops is something I'm rather proud of." It was around this time that live *Final Fantasy* concerts started to gain popularity in Japan, and in 2002 Uematsu attended the Tokyo Philharmonic Orchestra's sold-out show. This was the beginning of Uematsu's tenure as the 'face' of games music, and the composer found himself overwhelmed by the fan reception to his scores – especially as the Orchestra started playing his personal favourites, headlining sets with *To Zanarkand*.

Uematsu ended up leaving Square in 2004 to pursue a career in freelance composition, but remained on good terms with old friend Hironobu Sakaguchi. Uematsu's work between 1998 and 2001 on non-game projects gave him a taste for the wider world of music, and as Square evolved and became a more commercial beast, Uematsu found himself moving further away from the publisher – on a physical level as well as an emotional one.

"There were many different reasons [leaving Square]. A lot of people will think I'm joking when I say this, but one thing that influenced my decision to become a freelancer was that the company [Square] had recently relocated and it took me a lot longer to get to my workplace. I used to drive to work most days, but driving all the way to Shinjuku was a big stretch for me, really. I felt that there were better ways to spend the time I lost through my daily commute. But there was also another reason. I had been in the game industry for two decades, working on nothing but videogame soundtracks. If you look at life like a big learning process, I felt like I had graduated from this part of my life. I was ready to move on to the next school."



» [PlayStation] The jump to 32-bit systems enabled Uematsu to refine his work.

Uematsu still very much identified as a rock musician, despite making a name for himself in the pseudo-classical sphere of music in videogames, and having that music translated into live, orchestrated performances. Sensing this desire from their contemporary, fellow Square employees Kenichiro Fukui and Tsuyoshi Sekito offered Uematsu the chance to join their *Final Fantasy*-influenced live rock band, The Black Mages.

Initially, Uematsu was resistant, but after supporting the duo with keyboard parts at a live show in 2003, he caved and agreed to be a part of the band proper. Consisting of Uematsu himself, the two founding members, Keiji Kawamori, Arata Hanyuda and Michio Okamiya, The Black Mages became an official band, and Uematsu's musical diversity took on a whole new shape.

"My original idea was to be the band's producer and nothing else," he tells us. "I never planned to play any instruments myself. But then Mr Okawiya, the guitarist, said he was out if I didn't play with the band. It was such a crazy thing for him to say, but it made me feel guilty enough to give in to his request."

When asked where the original idea for the band came from, Uematsu was keen to deflect back to the original two Square staffers that approached him. "The idea for the band originally came from Mr Fukui and Mr Sekito. [They] should get the credit. They thought it would be fun to do these rock arrangements of the ▶



» [Xbox 360] *Blue Dragon* had its share of great music.



» As of September 2015, Uematsu has appeared in at least 520 videogame concerts. He was given his own Guinness record for the feat.

battle themes from *Final Fantasy* and played some samples for me."

This wouldn't be the only live rock/game music band Uematsu would find himself in, though: in 2010 he founded Earthbound Dads and got straight to work on making his dream version of *Final Fantasy VI*'s *Dancing Mad a reality*. Fast-forward a year and his classical-inspired arrangement has been performed myriad times within a progressive rock context, and Uematsu has again toured the world, bringing his Deep Purple, The Who and The Beatles-inspired performances to life.

Despite moving away from Square (now Square Enix) in 2004 and going freelance, Uematsu remained particularly close to his old friend and colleague Sakaguchi, who had left the company a year prior to Uematsu. "We [still] have a very good working relationship, I'd say," Uematsu explains. "By now, I can more or less tell what kind of mood he's currently in from the way he writes his mails. You know, what words he uses and all that [laughs]. I know straight away if he needs me to finish a piece really quickly, what direction he wants me to take on a tune or if he's not really happy with my work. We know each other well enough to understand what's written between the lines."

This relationship with Sakaguchi resulted in a pretty decent start to Uematsu's career as a freelancer – it was Sakaguchi who landed Uematsu his first big gig as an independent worker, offering him work on 2006's *Blue Dragon*. Initially, Uematsu had intended to wind down his work life a little upon becoming a freelancer – after setting up his own studio (Smile Please) with his wife Reiko, and establishing his own record label (Dog Ear Records) based on his dog and mascot Pao, Uematsu intended to spend more time in his mountain cabin, but actually found himself working longer hours than he ever did at Square. And he was still working primarily on game soundtracks, too.

"I personally don't have a strong preference or wish to write only videogame music. It's just that I have been working in the industry for decades now, so naturally, people tend to think of me as a videogame composer. That's why I get so many offers to write music for videogames. But I'm not saying that I'm unhappy about that… I do enjoy the freedom that comes with working on soundtracks for role-playing games," Uematsu explains. "Getting to write different types of music is a lot of fun."

We asked Uematsu what he likes to listen to in his own time, what he likes to consume away from videogames – after all, considering his legacy, it makes sense that his tastes range far and wide, and his output is the natural result of a hybrid, eclectic taste. "[I listen to] all kinds of music, really. I randomly listen to many different genres like rock, jazz, classic or ethnic. The list goes on and on. There's no genre of music that I don't enjoy."



» [Wii] Uematsu helped compose the epic main theme for *Super Smash Bros. Brawl*.

When it comes to how Uematsu views his own impact on music, though, the outlook is a lot more humble. "Well… Maybe there [are] some young people out there who listened to my music and thought to themselves: 'I could do that. If something as unrefined as this is all it takes, I could do that guy's job, too.'"

It's another example of Uematsu's painfully humble attitude towards his own work – despite accolades from music bodies recognising his contribution to not just game music but music as a whole, Uematsu still seems to view himself as an imposter: a pretender to the throne he finds himself begrudgingly occupying.

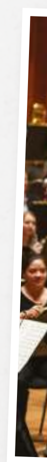


» [Xbox 360] *Lost Odyssey* saw Uematsu experiment with more styles, such as contemporary jazz and techno.

"My music is really extremely simple. If someone who listens to nothing but Beethoven sets out to become a composer, he will have a very hard time trying to live up to his idol. But I'm sure there are plenty of people out there who think they can write melodies that are just as good as mine."

That isn't to say Uematsu doesn't hold videogame music in high esteem, though: Uematsu even goes as far as to not listen to other pieces of games music because he wants his own style to remain pure, for his own sound to settle in naturally without external influences from the same field interfering with how he works. That's why most of his motifs and melodies come to him whilst he's out walking his dog. But there is one piece of music that Uematsu admits that had a big impression on him when he first heard its iconic opening notes. "The *Super Mario Bros. Theme*. That's absolutely fantastic, a real masterpiece," he laughs. "Everybody loves it! I don't think there's a single person out there who hates that melody. But what makes the theme so appealing to me personally? That's difficult to say. It's actually a rather complicated melody, and yet you can just hum along to it quite naturally. I wonder why that is. I really don't know. Mario's character, the way the game plays, the music. Just about everything about *Super Mario Bros.* comes together just beautifully. Koji Kondo is absolutely brilliant."

Uematsu has had a complicated relationship with game music throughout his career. On the one hand, it's been responsible for his worldwide success, his







> **"When you play a game with the sound turned off, it feels like you can't breathe properly"**
> Nobuo Uematsu

SELECTED TIMELINE

GAMES

- **MYSTERY QUEST,** NES 1987
- **FINAL FANTASY,** NES 1987
- **FINAL FANTASY II,** FAMICOM 1988
- **THE FINAL FANTASY LEGEND,** GAME BOY 1989
- **FINAL FANTASY III,** FAMICOM 1990
- **FINAL FANTASY IV,** SNES 1991
- **FINAL FANTASY V,** SUPER FAMICOM 1992
- **FINAL FANTASY VI,** SNES 1994
- **CHRONO TRIGGER,** SNES 1995
- **FINAL FANTASY VII,** PLAYSTATION 1997
- **FINAL FANTASY VIII,** PLAYSTATION 1999
- **FINAL FANTASY IX,** PLAYSTATION 2000
- **FINAL FANTASY X,** PLAYSTATION 2 2001
- **FINAL FANTASY XI,** PC 2002
- **FINAL TACTICS ADVANCE,** GAME BOY ADVANCE 2003
- **BLUE DRAGON,** XBOX 360 2006
- **LOST ODYSSEY,** XBOX 360 2007
- **SUPER SMASH BROS. BRAWL,** WII 2008
- **LORD OF VERMILION,** ARCADE 2008
- **FINAL FANTASY XIV,** PC 2010
- **OCEANHORN: MONSTER OF UNCHARTED SEAS,** PC 2013
- **TERRA BATTLE,** IOS 2014
- **FINAL FANTASY XIV: STORMBLOOD,** PC/PS4 2017



» [PS4] *To Zanarkand* (*Final Fantasy X*) is one of Uematsu's personal favourite tracks.

recognition in the Hall Of Fame on Classic FM, his status as one of the most notable musicians in gaming. But on the other, it's an area he never intended to fall into, and his life has been shaped by it.

Thing is, Uematsu doesn't like to think of himself held alongside the likes of Beethoven or John Williams, of being included in the myriad Halls of Fame he's been inducted into. "It does make me happy, don't get me wrong. But I'm worried that if I get too excited about these things, they might go straight to my head. That's why I try not to think about accolades too much!"

Uematsu's modesty shines through when we bring up luminaries of the classical music scene – despite having *Guardian* articles dedicated to outlining the comparisons in Uematsu's work and the classics, he still feels humbled to be mentioned in even the same paragraph as his predecessors.

"I do feel that these comparisons are something of an insult to John Williams and Beethoven," he explains. Maybe if Uematsu had ended up working in the romantic European movies he'd grown up admiring, he'd have felt different about his place in composition history. "After all is said and done, my music is just a series of notes that I come up with while I'm humming. They're not complex or intrinsically crafted compositions. I just make them up randomly."

But that isn't to say Uematsu disregards the impact of his aural soundscapes have on the projects they accompany. "Just try to play a game with the sound turned off and you'll see straight away [how important] music is to games", he explains. "It feels like you can't breathe. I think music plays a role in videogames that's similar to air or oxygen. When you play a game with the sound and music turned off, it feels like you can't breathe properly."

It's that understanding Uematsu has for the relationship between a videogame and its score that has lead to millions of people around the world enjoying his compositions – even outside of the traditional gaming space. Uematsu has appeared five times in the annual Classic FM Hall of Fame, and even reached third place in the esteemed listings in 2013, with the organisation calling him 'part-John Williams, part-Wagnerian leitmotif, part new-age soundscaper – and a legend in his own right', high praise for someone that considers himself an outsider in his own field.

Without Uematsu, role-playing games wouldn't be where they are today. His ear for the cinematic, the grandiose, the progressive, the nuanced has left an impact on generations of players, and is now starting to proliferate outside the industry and draw more people into retro gaming for inspiration, artistry. There are very few people that have the right to shout about doing such a thing, but the ever-humble Uematsu wouldn't: he'd rather just carry on humming a new melody to himself whilst he's out walking his dog. *



» In 2012, *Aerith's Theme*, from *Final Fantasy VII*, was voted into the number 16 position of Classic FM's annual Hall Of Fame top 300 chart.

Special thanks to Thomas Böcker for arranging this interview.

Gunstar Future Heroes

STAY HUMBLE, KIDS

» RETROREVIVAL



» **GAME BOY ADVANCE** » **TREASURE** » **2005**

A long time ago, I was part of a project to develop a Game Boy Advance game. A couple of friends had picked up coding experience through making mods, I had a small bit of testing experience and could sling words in the name of promoting the game, and we picked up an amazing musician through message boards. We thought we had a reasonable grasp of the hardware, but one day we saw something on the handheld which completely blew us away. That special something was *Gunstar Future Heroes*.

Treasure has always been known for impressive feats of coding, but *Gunstar Future Heroes* looked like voodoo to us. Every stage was packed with crazy special effects, from excessive explosions to enormous multi-sprite enemies, and at one point an *After Burner*-inspired section featured not only a multitude of scaling and rotating sprites, but a scene which fully rotated as you moved around to dodge missiles. The game was packed with these excellent little nods to Sega history – the rotating maze inspired by *Flicky* and the overhead *Thunder Blade* section are just a couple of examples. Admittedly, beyond those extra touches the game felt more like a reimagining of the original game rather than a proper sequel, as levels stuck closely to the themes of the Mega Drive classic. Still, we were mesmerised.

We were duly humbled, and the coders worked even harder to get the best from the Game Boy Advance hardware – which they did, to their credit. If only we'd finished the bloody thing. *




455



>> This month we play a remake 25 years in the making, get to grips with Jeff Minter's first VR game and find out if it's worth paying £35 for a nine-year-old version of Street Fighter II



» [3DS] Archers are incredibly powerful in *Echoes*, more so when they change class and can attack from even further away.

Fire Emblem Echoes: Shadows Of Valentia

SOMETHING OLD, SOMETHING NEW

INFORMATION

» **FEATURED SYSTEM:** 3DS
» **RELEASED:** OUT NOW
» **PRICE:** £39.99/£74.99 (LIMITED EDITION)
» **PUBLISHER:** NINTENDO
» **DEVELOPER:** INTELLIGENT SYSTEMS
» **PLAYERS:** 1



You have to hand it to Intelligent Systems: it's not only managed to successfully resurrect its obscurest *Fire Emblem* game, but has also created a genuinely fresh direction for the series to head in. Of course, it's important to remember that many of the 'new' gameplay systems of *Fire Emblem Echoes: Shadows Of Valentia* aren't new at all, having first existed in the original 1991 Famicom game, but they still represent a big change to the series if you've only experienced the more recent *Fire Emblem* releases.

The most notable difference is that there is now a large overworld map for your two main heroes (Alm and Celica) to separately travel across, which conveniently shows you the strength of any nearby enemy. *Gaiden*'s dungeons return as well, but have been impressively enhanced, allowing third-person versions of Alm and Celica to run around the locations smashing crates and bottles in the hope of retrieving coins or new loot. Running into enemies here will trigger standard battles, but you can slightly reduce enemies' energy by landing a blow on them beforehand. Dungeons are a critical addition as they serve a variety of useful purposes – new characters can be found in them and recruited, they house springs of water which will boost experience, attribute points and even resurrect the dead and they also allow characters to change classes by praying in front of the shrines that are contained in each dungeon. These areas are also one of the most reliable places to grind in order to reach the requirements to best certain foes that are found in later areas of the game.

Another mechanic from *Gaiden* that was unused in later games, but suitably enhanced here, is the ability to visit the



» [3DS] While the dungeons start off weak, they improve as you delve deeper into the overworld.



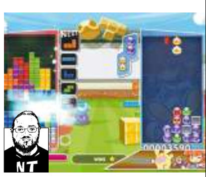
BRIEF HISTORY

» Intelligent Systems' strategy series first sprung to life in 1990 in the form of *Fire Emblem: Shadow Dragon And The Blade Of Light*. The series however didn't make it to the west until the 2003 release of *Fire Emblem* (or *Fire Emblem: Rekka No Ken* as it was known in Japan). *Shadows Of Valentia* is actually a remake of *Fire Emblem: Gaiden*, the second game in the series.

✱ PICKS OF THE MONTH



DARRAN
Polybius
Incredibly accessible, yet difficult to master, this could well be Jeff's best game to date and it's amazing in VR.



NICK
Puyo Puyo Tetris
What do you mean this section is only for new games I'm currently playing? I'm still punishing Drew and Sam on this!



» [3DS] You can switch between the two main characters at any time, ensuring you rarely get stuck.



» [3DS] The beautiful artwork is by Hidari, who has also worked on the *Atelier* and *Toukiden* franchises.

many villages that are dotted throughout Valentia. They not only give you a chance to recruit new characters and progress storylines between existing heroes, but also let you enhance weapons at the local smithy, discover new items, and attempt a large number of sidequests. Admittedly, many of these quests are relatively simple affairs, but it all adds to *Echoes*' atmosphere and makes you feel like you're engaged in a truly epic adventure.

And the quest found in *Echoes* is surprisingly substantial, taking a good 30 hours to complete. Focused on Alm and Celica, *Echoes* tells the story of two childhood friends who are eventually separated and thrust onto a new path that will hopefully reconcile two warring countries. It's a story that we've heard countless times before, but like other *Fire Emblem* games it's well told and enhanced by a large selection of genuinely likeable and interesting characters. You can see the plot twists coming from a mile off, but the engaging narrative and surprisingly strong voice acting certainly helps to elevate it over other similar games. While it's still possible to interact with other characters on the battlefield, there are no in-depth relationship trees like in *Awakening* and *Fates*. You won't be making babies in *Echoes,* either. It was inevitable that the relationship systems found in more recent *Fire Emblem* games would be cut down due to the older source material, but it doesn't hinder in *Echoes* in any way. Indeed, some may well welcome the change.

If some long-term fans will be disappointed by the weak relationship mechanics they should be more than happy with *Echoes*' combat, which is as deep and as satisfying as it has ever been. While some will be disappointed that the popular 'weapon triangle' system is absent, many core staples, such as flying units being affected by archers and heavily armoured units being virtually invincible to lighter units, still factor heavily in combat. The terrain is also tremendously important this time around, giving *Advance Wars*-styled bonuses that can help swing a battle in your favour. Another interesting aspect of *Echoes* is that characters have health drained when they cast spells or use arts (*Echoes*' equivalent of special powers) meaning that every move and action needs to be carefully considered before it is taken. Permadeath is still a thing, which pleases us, but there's also an option to turn it off, meaning any lost characters are fresh-faced for battle during the following skirmish.

The biggest change to the gameplay comes in the form of Mila's Turnwheel, which effectively allows you to continually rewind time so that you can save characters, or simply try out another strategy. We actually found it quite useful and as you only have a set number of uses during each battle so it's still possible to permanently lose characters if you're poor at planning. Less fun is the small group of mages you encounter in battle that will continually summon monsters to harass your already hard-pushed troops. While the summoned troops immediately vanish once their summoner has been killed, it still makes for some needlessly annoying difficulty spikes.

Difficulty aside, *Echoes* is another solid addition to the *Fire Emblem* series and a great strategy game in its own right. It might be built on mechanics that are 25 years old, but they've been suitably refined to make them fresh and relevant. The end result is a superb remaster that embarrasses many of its HD peers that are on the market. ★

In a nutshell

An excellent strategy game that takes the forgotten mechanics from an earlier game in the series and rejuvenates them to create a brand-new direction for the franchise to head in.

>> Score **88%**



★AMIIBO POWER

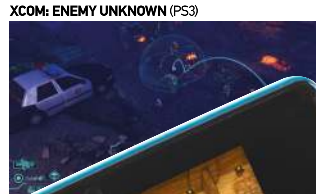
Like many other 3DS games, *Echoes* features amiibo support, primarily for Alm and Celica who are included in the limited edition, or available separately. Simply touch either amiibo to the screen and you can sacrifice a proportion of your hero's health to summon an illusory hero that fights on their behalf. It's also possibly to summon other heroes from the *Fire Emblem* franchise like Ike, Roy and Marth if you have access to their available amiibos. In addition to summoning helpers, Alm and Celica both unlock unique dungeons which are filled with useful items and bosses to battle. They're not the biggest dungeons we've encountered in the game, but they're a nice addition to the main quest and are certainly on par with the numerous pieces of DLC that Nintendo has started to release.

★ WHY NOT TRY

▼ SOMETHING OLD
ADVANCE WARS (GBA)



▼ SOMETHING NEW
XCOM: ENEMY UNKNOWN (PS3)





Ultra Street Fighter II: The Final Challengers

» **System:** Switch » **Buy it for:** £35
» **Buy it from:** Online, retail

Considering this is *Street Fighter*'s 30th anniversary, Capcom's come up with a weak way of celebrating it. Rather than releasing a compilation of the best games in the series, Capcom has rather lazily taken a nine-year old release, added two uninspired new characters (Evil Ryu and Violent Ken) an awful Joy-Con minigame and attached it all to a barebones online system. It comes with an art book, and yes the gameplay has been tweaked in places, but this is staggering overpriced and hard to recommend. There's a great line in *Community* where leading layabout Jeff Winger suggests his friends should create an assignment thats "doable and passable". It sums up *The Final Challengers* perfectly.

>> Score **62%**



Arkanoid Vs Space Invaders

» **System:** iOS » **Buy it for:** £3.99
» **Buy it from:** AppStore

Some mashups feel like cynical collaborations designed to do nothing more than milk their audiences until they have no money left to give. This new effort from Square is different. It not only pays tribute to both franchises, but meshes them together to great effect, too. Playing as a Vaus (the craft from *Arkanoid*) you must deflect fire from the Space Invaders back at them to destroy them. Each level has a certain objective (which is typically killing a set number of Invaders) that needs to be completed within a time limit before you can move on. It's incredible fun and is only really let down by some highly annoying difficult spikes that can be an absolute pig to get past.

>> Score **77%**



Polybius

» **System:** PS4 » **Buy it for:** £13.99
» **Buy it from:** PlayStation Network

Jeff Minter's new game is a simple shooter at its core, but it's one that beautifully pushes the 'risk-versus-reward' concept that features in his titles. You could simply shoot things until your ten shields run out, but you'll miss so much if you do. First you notice that racing through bull horns not only speeds you up, but increases your multiplier, and that passing through a set amount of gates will send out shockwaves that disperse enemies. There's plenty more to discover but we'll leave that to you.

Polybius also works incredibly well in VR, as it's a lot easier to judge distance between gates and allows you to truly get 'into the zone'. The format seems made for Minter and we're eager to see what he does next.

>> Score **95%**



» [Mega Drive] "Running away from danger, hiding from every stranger."

SCRATCHING OUR HEADS

Puzzle games are the mainstay of homebrew software, and there have been quite a few released recently for a range of platforms. For a start, we've got the Amstrad CPC release *Pentomino*. Here, the player is presented with a space and shapes which must be placed together in order to fill it. They don't always start in the correct orientation, however, and will often need to be rotated or mirrored before everything slots together properly. *Pentomino* can be downloaded from Kikstart.eu/pentomino-cpc and offers different difficulty settings so that players can find something to suit them.

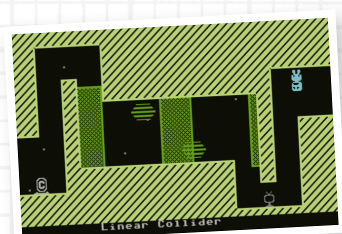
We also have *Mr Mind* for the Plus/4 from the Assassins. This is a version of the board game *Mastermind* where the player takes on the role of codebreaker and must work out the correct sequence of coloured beads, placing columns of four and having each try scored for accuracy. Both correctly-placed beads and those which are the right colour but in the wrong place are flagged, so the player can factor that information into the next pass. It's simpler than we're making it sound but still tricky to play well, find out behind Kikstart.eu/mind-264.

For a more action-oriented challenge there is the Mega Drive release *Xump 2* from Retro Guru – the developers behind the fiendish *Sqrxz* series of platform games – where the titular yellow 'head bot' needs to be guided around the playing area, causing all of the collapsible tiles to disintegrate by passing over them. As with similar titles, such as *Sensitive* for the C64 or *Zip 'N' Zap* on the Oric, this really isn't as easy as it sounds and, once the early stages have been taken care of, some thought will be needed to avoid painting the droid into a corner. Head to Kikstart.eu/xump-2-md.

Finally, there's *VVVVVV* on the C64, which is a conversion of Terry Cavanagh's platform-based puzzler from 2010 where Captain Viridian must be guided through his space ship which has been trapped in an alternative dimension, finding his missing crew along the way. There are mobile enemies and hazardous areas of the ship to work around, and, rather than jumping, the good captain can instead invert gravity, which allows him to switch between walking across the floor and clambering across the ceiling to get through the various challenges. Kikstart.eu/v6-c64 goes to a post on the forums at C64Scene.pl where the download can be found.



» [Plus/4] Some people can play *Mastermind*, others struggle.



» [C64] "Something's going on that's not quite clear, somebody turn on the lights."

NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at: **darran.jones@futurenet.com**



IT'S NOT EASY

Frogs on the C64 is an action game for two to four players. Like the developer's previous game, *Shotgun*, it supports a couple of options to add extra controllers to the C64, including Classical Games' four-player interface and this time the soon-to-be-released SuperPad64 adapter which uses SNES pads. There are six arenas and three distinct game modes with different goals to choose from so things won't get stale in a hurry. Kikstart.eu/frogs-c64 has a download and links to information about the new multiplayer adapter.

"It's time for MSX owners to go adventuring with Tales Of Popolon"



» [MSX] One of the less friendly denizens of the dungeon.

EXCITING TALES

A malevolent force has constructed a dark fortress at Mount Olympus and is using godlike powers to destroy towns and sink ships. For some reason only mortal souls can enter, so the legendary hero Popolon has been asked for his help by Thanatos. That means it's time for MSX owners to go adventuring with *Tales Of Popolon*, a 3D dungeon crawler where the titular character must defeat monsters while collecting weaponry and other power-ups which will help in their quest. The start of this challenge is lurking behind Kikstart.eu/popolon-msx, check it out!

HOMEBREW HEROES

Graham Axten is the man behind Bear Essentials on the Commodore 64, a cute platformer that has claws. We sat down to share a huge apple and talk about Bear and his world



THE BIG INTERVIEW Graham Axten

Where did the idea for *The Bear Essentials* come from?
It started with the main character, Bear, who I wanted to be likeable, cute, humorous, puzzled and burdened all at the same time, which is a lot to fit into a C64 sprite! The rest of the game then formed from the fact that he needed objects to collect and a reason to be collecting them, so it just seemed logical that he should be collecting food for his family to last the winter.

How long did it take to create the game and who was involved?
It was just myself working on the game for around two years but I had lots of support from other people when it came to testing and getting opinions on difficulty and play times. I was invited to join Pond Software around half way through development, which was a big motivator for me; knowing that I was part of a team and there was help available if I needed it. I'm not sure the game would have made it to completion without Pond.

Pond publishes *The Bear Essentials* on disk. How much work was involved in order to do that?
For me it meant a couple of extra months after the free version of the game was released adding some extras for the disk, a few new features for the game and designing the manual. Most of the work here should be credited to Pond's founder, Vanja Utne, who has done a fantastic job of putting the physical copies together, organising the printing, writing the disks, sourcing all of the required materials and drawing those lovely illustrations for the advert and cover. I'm chuffed to bits with the way it has turned out.



» [C64] *Bear Essentials* truly is a great looking game.

What sort of feedback have you received so far from Commodore 64 gamers?
I've been blown away by the reception it's received. It means so much to me to see pictures cropping up on Twitter of people enjoying the game, and even more so when they say that their kids ask to play the game, that's something I never imagined would happen. The coolest feedback I got was when somebody said that their kids had been doing 'The Bear Dance' which really made all that effort I put into the title sequence worthwhile!

And looking back, is there anything you would have done differently?
I put in a password system fairly late in the game's development as I feared that it would be too long to complete in one sitting. It was meant to split the game in two, but thinking about it now, it's more like an 80/20 split, so I would probably add more passwords.

Finally, are there any further outings planned for Bear?
I definitely have some ideas for a sequel, yes. I don't think I could come up with another 60 room designs in the current form though, so I think a few gameplay changes would be required to keep things interesting.

» [C64] The distinctive, cartoon-like visuals remind us of *Mayhem In Monsterland*.



Gaming REVIEWS

·DO YOU· REMEMBER?

We've arrived in an alternative reality in 1988 called Terminal City and the mainframe computer behind C64 online service Compunet has gone bonkers, making it almost impossible to dial in, and it's charging a fortune for chat service Partyline. No less than 15 terminals, owned by Compunet luminaries including Stoat & Tim, Perdita and Jeff Minter need to be activated using special software in the correct order to unlock the mainframe itself so that it can be rebooted.

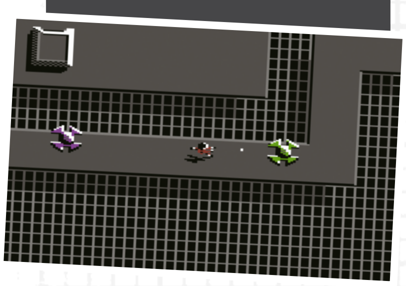
Terminal City is a big, scrolling place and there's a lot of travelling to do so keeping a map will help; our hero can choose between walking around while shooting the roaming enemies – this earns credits to buy disks – or switching to a hover board which is faster and can ram nasties. Kikstart.eu/terminal-city-c64 takes you there.



» [C64] Wandering around near Jane's office.



» [C64] Six terminals down, nine to go.





» [Master System] Some impressive parallax scrolling on this claustrophobic world.

ASTRO FORCE

» **FORMAT:** SEGA MASTER SYSTEM » **DEVELOPER:** MIKGAMES » **DOWNLOAD:** KIKSTART.EU/ASTRO-FORCE-SMS » **PRICE:** FREE

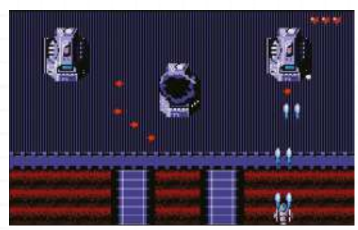
Earth of the not-too-distant future has come under attack, with hostile alien craft appearing without warning to rain destruction down on the entire planet. Mankind's only hope is the snappily-titled TX-1889-W, a small fighter which must be piloted into battle with the enemy forces. The only problem is that, although it has two different weapons which can be used at any time, the craft is underpowered for the job at hand. Thankfully, items gathered from destroyed enemies will make the weapons a little more formidable and speed the craft up.

Even when fully powered up the TX-1889-W still isn't exactly a killing machine, and those weapons are lost when a ship is destroyed. Getting up to full power is also difficult in part because catching the falling items when surrounded by adversaries is tricky, so keeping the current unit in one piece is important and the pilot will spend a lot of their time dodging hazards rather than trying to blast them.

Astro Force is seriously challenging even on the 'easy' difficulty setting to the point where its developer – who has described himself as being good at shoot-'em-ups and a fan of titles like *Aleste* or the MSX *Nemesis* series – has recommended that players use the option menu to dish out six lives for themselves. The low speed of the ship, compared to everything else onscreen, combines with some overenthusiastic collision detection and occasional enemies sneaking up from behind to make dying a regular occurrence and recovering from it frustratingly difficult.

That's something of a shame, really, because this package sports impressive graphics and presentation throughout, parallax scrolling on some of the stages and catchy in-game music, but having the difficulty being geared so high means that most players will have a try of the first five stages which can be selected when the game starts before becoming frustrated and turning their Master System off without seeing what else *Astro Force* has to offer.

>> Score **67%**



» [Master System] One down, but two more heavily armed bases to go.



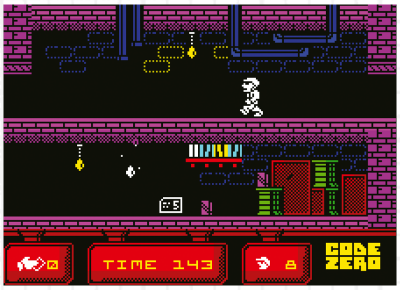
» [Master System] How not to win friends and influence people using lasers.

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CODE ZERO

» **FORMAT:** SINCLAIR SPECTRUM » **PRICE:** FREE
» **DEVELOPER:** PAUL JENKINSON
» **DOWNLOAD:** KIKSTART.EU/CODE-ZERO-SPEC

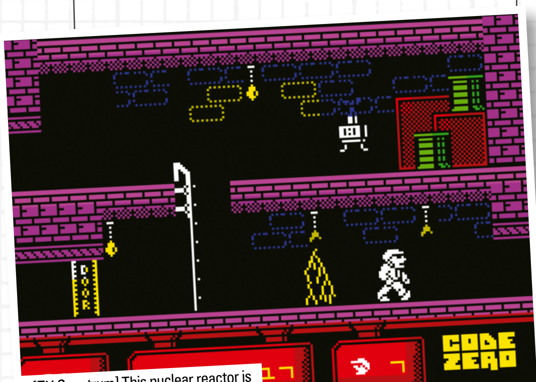


» [ZX Spectrum] I've got to take a step back and think this through.

By 2077 the Earth has been stripped clean of resources and the only feasible option is nuclear power, with the massive DCR Incorporated being the sole provider. When its scientists stumble upon a new, extremely powerful isotope it gets rushed into testing but something serious goes wrong and there's only a limited amount of time to shut the server down before everything implodes, taking the entire planet with it.

A Code Zero alert has been issued to locate and activate the closest agent to take this task on, but to reach the server room he'll need key cards for the security doors. These have been left lying around by the reactor's staff as they evacuated but, although the keys themselves are numbered, it's up to the agent to figure out which door each card unlocks. There isn't much time before meltdown and he'll be doing a lot of running around.

» Score **80%**



» [ZX Spectrum] This nuclear reactor is a total health and safety nightmare.

ZEVIMODOKI

» **FORMAT:** MSX2 » **DEVELOPER:** GW'S WORKSHOP » **PRICE:** FREE
» **DOWNLOAD:** KIKSTART.EU/ZEVIMODOKI-MSX

Deep-space exploration has always been known as perilous work, but most people expect the level of danger to drop considerably when something interesting has been discovered. This isn't always true, however, and the inhabitants of a recently-found, Earth-like world, which would otherwise be perfect for the human race, have a large arsenal of weaponry to take on what they're seeing as an invading force.

Zevimodoki is a vertically-scrolling blaster that can become very challenging, but that's to be expected of a game which is something of a love letter to classic coin-ops, like *Xevious*. The action becomes more manic as the player's score increases and as they progresses through the stages, but it still feels manageable right up until that momentary lapse in attention which sees the ship atomised. MSX2 owners who like blasting aliens should look at taking this one out for a test flight.

» Score **88%**

» [MSX] Making mincemeat of the space snake while surrounded by bullets.



BEAR ESSENTIALS

» **FORMAT:** COMMODORE 64 » **DOWNLOAD:** KIKSTART.EU/BEAR-ESSENTIALS-C64
» **DEVELOPER:** POND » **PRICE:** FREE OR £15 FOR ENHANCED DISK

Bear has spent the summer being lazy and hasn't done any of his chores. As winter rears its frosty head, his wife has put her foot down and sent him foraging for food so that they don't starve. By her calculations, keeping the family fed will take over 300 apples, so Bear has got his work cut out for himself. There are lots of places to search with most of the map open to visit in any order, apart from the mine which is off limits until everything else has been cleared.

Bear Essentials is a cute-looking platformer in the style of Thalamus adventures such as *Summer Camp* or *Creatures* – there are a couple of cameos to find along with the apples – however that means it isn't a walk in the park, making Mrs Bear's quota and avoiding all of the other creatures is a serious, but entertaining, undertaking.

» Score **92%**

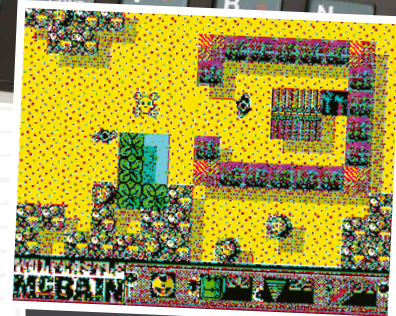


» [C64] Searching high and low for juicy apples.

retro GAMER SIZZLER



» [C64] Reaching new heights while gathering that all-important fruit.



ROUNDUP

Wolfcastle McBain was inspired by *Simpsons* character Rainier Wolfcastle and his fictitious McBain series of movies. It's a top-down, flip-screen shooter with a little strategic thought required because many of the zombie-like enemies will respawn once blasted, so *Wolfcastle* will need to allow for this when traversing some of the trickier screens. Kikstart.eu/wolfcastle-spec goes to the World Of Spectrum forum thread where the download can be found.

Skilled mecha pilot Tricia Thunder is back in action, taking on enemies in a preview version of *Mecha 8* on the Master System. Converted from the MSX by the original developer, a preview of this entertaining shoot-'em-up can be downloaded from Kikstart.eu/mecha-8-pre-sms – the original was a lot of fun, so we're looking forward to seeing the finished version.

MAILBAG

HAVE YOUR SAY… SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

WIN! Every month, one lucky writer-in will receive a copy of our latest eMag, **Retro Gamer Load 3**, a bargain if ever there was one



STAR LETTER

BACK TO THE SOFA





» [Switch] We've been Switch multiplayer, too – *Puyo Puyo Tetris* has become an office staple.

Dear **Retro Gamer**,
I've experienced the future of multiplayer games! And, wouldn't you know it, it's the history of multiplayer games. I'm talking about sitting down on a sofa and playing some games with your mates, trash-talking one other as you battle long into the night. Since I bought a Nintendo Switch, I have been able to play the likes of *Bomberman* and *Mario Kart* just like I used to on the Super Nintendo.

Don't get me wrong, I love epic single-player games and online matches are nice and convenient, but going back to local multiplayer has proven that it isn't just nostalgia – getting a bunch of friends crowded around a single TV really is a better experience. We really did lose something in the transition away from local multiplayer, and I'm thrilled to have it back.

What I can't figure out is the exact point at which we lost our love for getting together and gaming. As historians of the gaming realm, could you provide your opinion?
Pete Haskins

It's fairly obvious to point to the last generation, specifically the Xbox 360 and PlayStation 3. Broadband adoption rates were high and the gaming services were either free or affordable, meaning that local multiplayer dropped back to the likes of *FIFA* and *Street Fighter IV*. But you can see the trend starting as early as 2005 – *Quake 4* omitted split-screen, despite *Quake III: Arena* having offered it on both Dreamcast and PS2, while *Project Gotham Racing 3* offered split-screen for just two players instead of its predecessor's four.

Of course, that wasn't the whole story – Wii owners had a blast with the likes of *Wii Sports, Mario Kart* and *Rayman: Raving Rabbids.* But self-styled 'h4rdc0r3 g4m3rz' wouldn't have noticed any of that, because the Wii was 'just for kids and grannies'. Fools.



» [Video Driver] Here's *California Chase*, one of the 'games' packed in with Sega's Video Driver. *Out Run* it ain't.

VHS ENGINE

Hello **Retro Gamer**,
Your article in issue 165 on the Action Max VHS-based games console stirred a memory in me. Back in the early Nineties, when I was still in primary school, my parents worked late and I would attend an after school club. Along with the colouring pens, Lego, and plasticine, we had a Master System II to keep us entertained. One day, someone brought another Sega system I'd never seen before, or since.

It used VHS tapes rather than cartridges (or CDs, like the then impossibly-cool Mega-CD). The one 'game' I can remember was a car-chase sequence. The console had a steering wheel with a small toy car mounted to the front. The player would put this in front of the TV, and the wheel would make the car move left or right. In this manner, the player could avoid oncoming traffic.

Initial excitement soon gave way to boredom, as I quickly realised that you couldn't win or lose. It didn't matter if you steered the little car or not, if you didn't move it, the chase would play out exactly the same – there was, unsurprisingly, no collision detection. Seems this Sega system was even less interactive than the Action Max – there wasn't even a score-chasing element to keep you coming back.

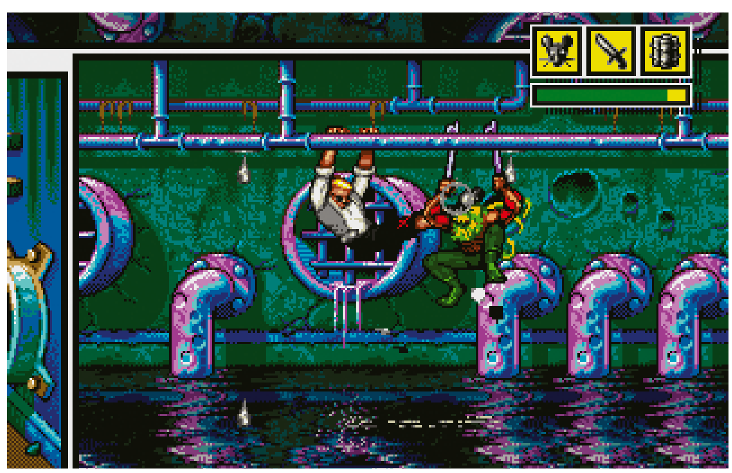
I can't seem to find anything about this machine online, and I'm pretty sure that it was a Sega-branded unit. Does this ring a bell for you or any of your readers?
Adam Neather

It does indeed – the device you're referring to is the Video Driver, which was designed by Sega and distributed by Action GT in the UK and Tyco in the USA. Your memory is pretty good! However, there is actually a score-chasing element, as white lights at the bottom of the video picture represent obstacles. These are detected by the sensor that the toy car is mounted on, and points are displayed on a mechanical scoreboard on the steering wheel.

DOLLAR DOLLAR BILLS

Greetings from the state of Texas, USA. As one of many American **Retro Gamer** readers I have a bit of a puzzle maybe you could help me solve. Is there any chance that when you list the cost of an item you might include the cost in US currency as well?

Also I would love an article on *Pitfall II* for the Atari 2600 or one on *Comix Zone* for the Sega Genesis, both are two of my all-time favourites.
Steven Martin



» [Mega Drive] We've already covered the rather lovely *Comix Zone,* way back in issue 123.

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Snail Mail: Retro Gamer, Future Publishing, Richmond House, 33 Richmond Hill, Bournemouth, Dorset, BH2 6EZ

Email: darran.jones@futurenet.com



» [Atari 2600] *Pitfall II: Lost Caverns* has been covered, it was ten years ago so you may have missed it.

COLLECTOR'S QUERY

Hello Darran,

Firstly, thanks for a great read with every issue published.

I wanted to reach out and see if **Retro Gamer** would be interested in highlighting my game collection for the Collectors Corner of the magazine.

My fondness for games and game collecting dates back to when I got my first NES in 1990 and still continues to this day. I've honestly lost count of how many games I have but I have included several pictures of my collection. I have everything from NES, SNES, Genesis, Sega CD, 32X, Saturn, PlayStation,N64, PS2, Xbox, Wii, Wii U, Xbox 360, Game Boy, Game Gear, and all sorts of peripherals. I'm in the process of alphabetising and organising my collection as I've just moved in with my girlfriend. She loves my collection… especially my collection of old tube TVs.

If you would be interested in highlighting my collection I can provide exact details of all the games I have.

Thank you and I look forward to your reply.

Juan Heredia

Hi Steven, you'll be pleased to know that we've covered both *Pitfall II* and *Comix Zone* in the past. The Making Of *Pitfall II: The Lost Caverns* ran in issue 37, way back in 2007, and the Making Of feature for *Comix Zone* was in issue 123.

As for price information, we'd like to cater to our international readers but we've got friends in too many places – as well as the US and Canada, we're also popular in continental Europe as well as Australia and New Zealand. As a result, we'll be sticking to pounds and pence for the foreseeable future.

We're always interested in featuring collections, but we do have one restriction: the collector needs to be able to provide good photography of their haul, suitable for high-res printing. We'd advise you to use a good camera rather than a mobile phone, especially if your collection is in a loft or an area that doesn't get natural light.

DISCUSSED THIS MONTH

Mr 151 issues

As we were sending this issue, we calculated that it was Darran's 151st issue. Upon realising that we missed his landmark 150th, we decided to celebrate his 'Mew' issue instead. For comparison, Nick's been on the mag for 46 issues, Drew's stuck around for 32 and Sam's just passed his one-year Retro Gamerversary at 14.





From the forum

Every month, **Retro Gamer** asks a question on the forum and prints the best replies...

Which game convinced you that 3D graphics would take over gaming?

kiwimike
I remember seeing the coin-op *I, Robot*. I had not the slightest idea what was going on! Never played it, but watched it with fascination when others were, and remember thinking this thing looked years ahead of its time.

Mayhem
Wolfenstein 3D. Okay it's not true 3D, but the effect was convincing enough on a platform that had the power to pull it off. I loved *Mercenary*, but it never convinced me 3D games would take off because it was a lone game in the midst of so many 2D efforts. *Wolfenstein* did, though. Maybe it was shooting Nazis that helped?

ianpmarks
Battle Zone. The first game I remember feeling like you were moving about a real 3D world. Hiding behind cubes, and sneaking up on enemy tanks. Great stuff.

VirtuaMuser
I remember walking with my family and us stopping in awe when we saw a Saturn running *Virtua Fighter* for the very first time at a shopfront. We all couldn't believe what we were seeing, and my dad exclaimed, "These look just like real people!" I think 3D fighters in general convinced me that 3D was the way forward.

The Laird
Hard Drivin' – it was just so amazingly realistic right down to the car handling. It was also one of the first games that home systems really struggled to replicate properly because it was so advanced.



» [Arcade] *Virtua Fighter* wowed many games with its striking polygonal fighters.

mrmessy
Starwing (*Star Fox*) on the SNES was the first non-arcade based 3D game that really amazed me. It felt like a new era of smooth and fast moving 3D games was finally taking shape... probably a triangle.

ncf1
Mayhem stole my answer, but if *Wolfenstein* was banging on the door then *Doom* sure as hell (see what I did there) ensured it came crashing down.

The Beans
I'd enjoyed plenty of 3D games over the years (*Elite*, *Mercenary*, *Carrier Command*, *Midwinter*, to name a few) but I wasn't convinced we were going fully into the third dimension until I played *Tomb Raider*. After that it was all over for 2D games for quite some time for me.

Hiro
POD: Planet of Death was my turning point. Luckily, because gaming in the mid-Nineties with the fall of Commodore and its endless 'interactive movies' was becoming terrible.

Future Publishing Limited
Richmond House, 33 Richmond Hill
Bournemouth, Dorset, BH2 6EZ

Editorial
Editor **Darran '150th issue' Jones**
darran.jones@futurenet.com
01202 586237
Production Editor **Drew 'Dizzy Denouncer' Sleep**
Senior Staff Writer **Nick 'Puyo Prime Minister' Thorpe**
Designer **Sam 'Finally Bought *Croc*' Ribbits**
Photographer **James Sheppard**
Group Editor In Chief **Tony Mott**
Senior Art Editor **Warren Brown**

Contributors
Martyn Carroll, Darvid Crookes, Paul Drury, Lee Garbutt, Craig Grannell, Kieren Hawken, Kim Justice, Jason Kelk, Graeme Mason, Rory Milne, Dom Peppiatt, Paul Rose, Mitch Wallace

Advertising
Media packs are available on request
Commercial Director **Clare Dove**
clare.dove@futurenet.com
Advertising Director **Andrew Church**
andrew.church@futurenet.com
Account Director **Kevin Stoddart**
kevin.stoddart@futurenet.com

International
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International Licensing Director **Matt Ellis**
matt.ellis@futurenet.com

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Head of subscriptions **Sharon Todd**

Circulation
Circulation Director **Darren Pearce**
01202 586200

Production
Head of Production US & UK **Mark Constance**
Production Project Manager **Clare Scott**
Advertising Production Manager **Joanne Crosby**
Digital Editions Controller **Jason Hudson**
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Management
Finance & Operations Director **Marco Peroni**
Creative Director **Aaron Asadi**
Art & Design Director **Ross Andrews**

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ENDGAME



NIGHT TRAP

» Kelly, played by Dana Plato, is an undercover agent investigating a string of disappearances at the Martin family residence. Of course it soon turns out that the family are vampires, and your only chance of preventing Kelly's untimely death is deft use of the household's traps, which you've helpfully hijacked. Will she make it out of the house alive? Let's skip to the end of the game and find out...



01

» Sheila, the matriarch of the Martin family, lunges at Kelly only to find herself caught in the unfamiliar bed trap. "But it was going to be a surprise," pleads Victor, shortly before his wife is surprised by being flung out of the window.



02

» Kelly flees into the bathroom pursued by Victor and Sarah, but the former is careless and stumbles into his own home security system. Keen to overact and narrate his own demise at the same time, he shouts, "The wall trap!"



03

» Sarah is the last of the Martins left in pursuit, but she commits a classic villain mistake, stopping to declare that Kelly is all hers and laughing. Your trap activation sees her sealed off before the floor drops from under her.



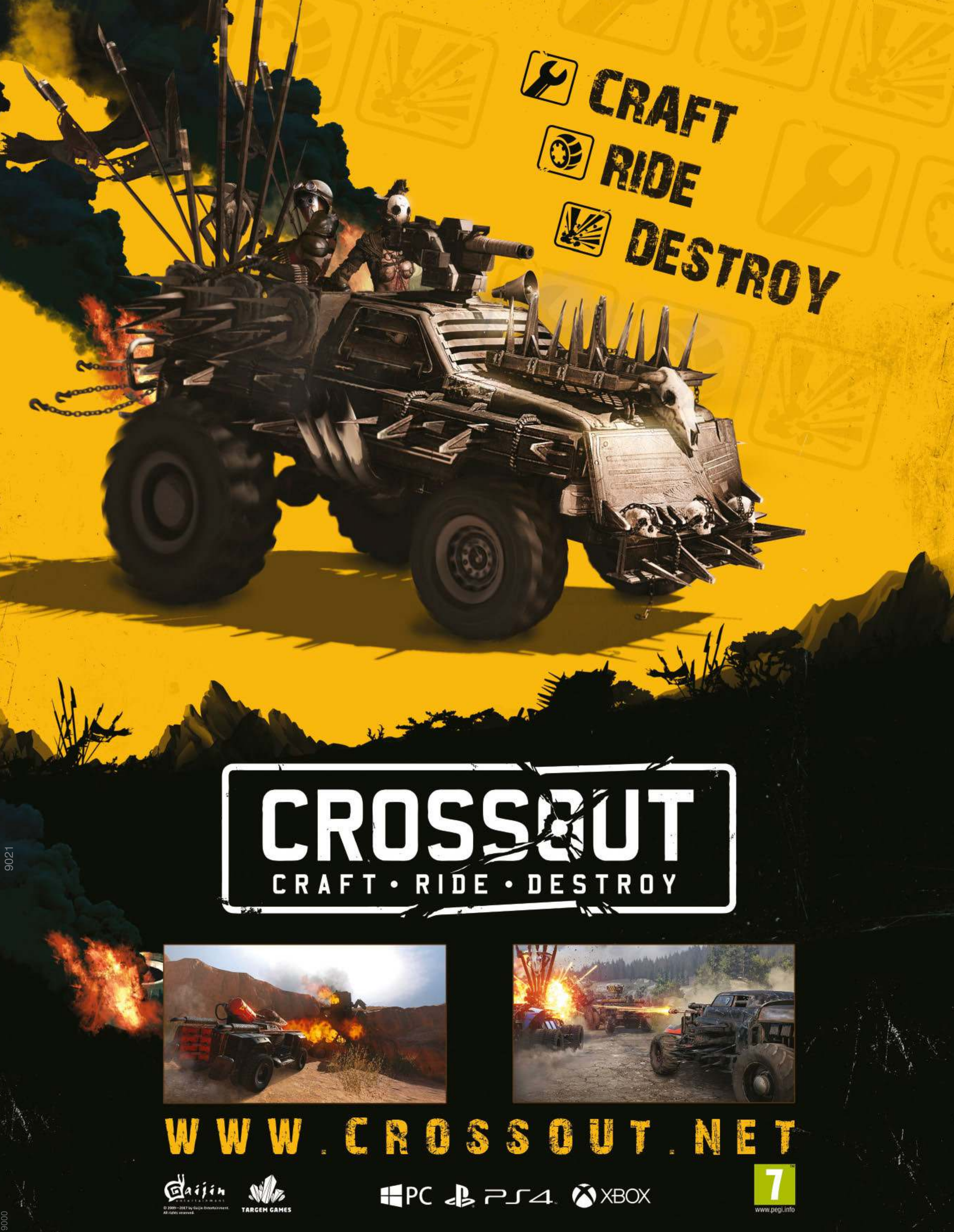
04

» Kelly can't thank you enough – not only have you saved her from the Martin family, you also managed to capture all 95 of the black-clad Augers that were roaming around the house. Next time, she says, she's going to personally request your assistance in whichever situation she finds herself in.



05

» But that won't happen. As Kelly turns to leave, you trap her, savouring the look of betrayal on her face as she screams, "I can't believe you'd do this to me after everything we've been through!" You smile as you watch her plummet to her death. Ban this sick filth!


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